PUBLIC POLICY AND THE PHILIPPINE HOUSING MARKET

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PUBLIC POLICY AND THE PHILIPPINE HOUSING MARKET

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FOREWORD

For many Filipinos, the realization of the vision of having and owning a decent structure which may be called a home has been somewhat an elusive dream. Although the government has launched a series of housing programs over the past three decades, the housing problem has not as yet been licked; and the gap between the people's housing needs and the supply of housing does not seem to have been reduced, let alone eliminated. The underlying causes are complex. The most that can be said about the situation is that it has been the result of many interrelated factors such as rapid population growth, inadequacy of resources for housing, fragmented approach to housing, low level of incomes and savings, etc.

In any event, the government has, in recent years, embarked on a more active and, hopefully this time around, more coordinated policy towards housing. To ensure the success of such venture, more information and data on the demand for and supply of housing, as well as more analysis of policy issues involving housing, are required.

It is towards this end that this study was prepared. In this Monograph, Dr. Edna S. Angeles, Research Fellow of the Philippine Institute for Development Studies, presents an analysis of the major aspects of the supply of and demand for housing, identifies housing problems and their underlying causes, attempts to estimate the income and price elasticities of demand for housing, and evaluates some of the housing policies and programs being undertaken by the government.

It is hoped that this study will not only help in clarifying various issues involving Philippine housing problems but also provide useful insights into policy making and planning in this vital sector of our society.

FILOLOGO PANTE, JR.
President

CHAPTER 1

INTRODUCTION

The history of national policies on housing in the Philippines registers a long list of unsuccessful programs. Thus, there are still hundreds of thousands of people trapped in poor and unacceptable living conditions today, a problem which remains unresolved as ever. The major causes of this problem emanate from the approach to housing taken by the authorities which is basically fragmented and uncoordinated. Further, resources are insufficient to sustain these programs while mismanagement remains widespread.

The government's responsibility to ensure that every Filipino enjoys a decent home has long been accepted as an important aspect of public policy. This is basically hinged on the constitutional mandate that the state shall "establish, maintain and ensure adequate social services in the field of housing . . . to guarantee enjoyment by the people of a decent standard of living." However, resources, unlike needs, are limited and competing claims of health and education on these resources may win out over housing. In this regard, a clear understanding of the problems of the housing sector is needed to enable the authorities to formulate a more cohesive and well-meaning program on housing. It is along this line that this study was undertaken.

The housing problem has worsened over the years as evidenced by the widening gap between the people's housing needs and supply especially in the 70s. This occurred despite the increasing housing investments undertaken by both the government and the private sector. In 1983, for example, total housing investment amounted to ₱4,765 million and this constituted 4.8% of GNP. This increasing awareness of the seriousness of the problem and the subsequent involvement of both the private and public sectors seemingly had little impact on researches so there were very few serious attempts to study the problems of the housing sector that have been recorded. Likewise, baseline information still remains scarce and difficult to come by.

The objective of this study is twofold. The first is to analyze the major aspects of supply of and demand for housing and in the process identify specific housing problems and their underlying causes. This is done by presenting a historical description of the housing situation highlighting the supply and need gap, affordability of households and housing cost. Likewise, an attempt to estimate the income and price elasticities of demand is made. The other objective is to review and evaluate some of the housing policies/programs undertaken by the government specifically the National Shelter Program. A historical sketch of the different housing programs is also presented.

The study is organized as follows: Chapter 2 presents the housing situation from 1960 to 1980, highlighting on specific aspects of housing need, affordability and housing cost; Chapter 3 further analyzes housing demand and an attempt is made to estimate the income and price elasticities of demand; some theoretical background on government intervention in housing is presented in Chapter 4 and this is followed by a review of the housing programs in the Philippines in Chapter 5; and, finally, the conclusion and recommendations are given in Chapter 6.

CHAPTER 2

THE HOUSING SITUATION IN THE PHILIPPINES: 1960-1980

This part of the study presents the housing situation in the Philippines from 1960 to 1980, in terms of basic census information such as the housing stock in the country by region and sector, the type of structure available, level and type of occupancy, and some measure of need and effective demand. Some aspects of the residential construction industry are also presented.

Trends and Patterns, 1960-1980

There have been significant increases in the housing stock in the Philippines during the past three decades. From a total of 4,790,954 dwelling units in 1960, this number has gone up to 8,767,644 units in 1980, reflecting an overall increase of 83.0% (see Table 2.1). This growth rate, however, may be overstated on account of some changes introduced in the definition of dwelling units used in the latest census. For example, in the 1960 and 1970 Censuses, military camps, dormitories, hotels and other forms of natural shelter like boats, caves, etc. were not included in the count. These same structures were, however, considered in the 1980 Census.

The regional distribution of the total housing stock indicates the prominence of the National Capital Region (NCR) and Region 4. The total number of dwelling units in these two regions constitute about 25% of the total in the country. Region 12 has the least number of dwelling units.

In terms of occupancy rate, the highest was recorded in 1970 when only about 1.5% of total dwelling units were found unoccupied. In 1960 and 1980 the occupancy rate was 97% as the figures show in Table 2.2. Most of these occupied dwelling units were classified as single houses accounting for 85% of the total in 1960, 89% in 1970 and 93% in 1980. It should be noted also that some non-residential structures are being occupied as dwelling units. From a total of 41,571 in 1960, this figure went up by 26% in 1970. Favor-

TABLE 2.1
NUMBER OF DWELLING UNITS BY REGION: 1960, 1970 & 1980

REGION	*1960*	*1970*	*1980*
NCR	406,071	649,268	1,091,473
1	493,922	515,743	663,208
2	191,184	298,834	413,156
3	437,356	600,337	852,705
4	531,075	706,682	1,132,217
5	396,281	483,982	620,743
6	532,786	596,293	799,408
7	477,389	532,767	719,249
8	383,124	417,845	530,677
9	231,383	304,508	444,429
10	261,285	319,424	498,144
11	333,228	363,704	612,093
12	115,870	310,457	390,202
PHIL.	4,790,954	6,099,844	8,767,644

Source: 1960, 1970 and 1980 Census of Population and Housing.

able housing conditions, however, brought down the figure to 41,000 in 1980.

More detailed data on occupied dwelling units by type of structure are given in Table 2.3. In 1960, most of the occupied dwelling units in all the regions were single houses, with Region 6 registering the highest number of occupied units. NCR had the most number of apartments/accessoria indicating the nature of housing accommodations in a highly urbanized area like Metro Manila where a big rented sector exists. The succeeding decade was characterized by the same housing pattern, except for the marked decrease in the number of barong-barongs in almost all the regions. There was also a very sharp increase in the number of occupied duplex and apartment units in NCR. This was a response to the pressing need for more housing accommodations in the metropolitan area which has a fast growing population on account of migration. A big jump was likewise evident in Region 3. Finally in 1980 further decreases in the number of barong-barongs were observed for most of the regions except NCR.

TABLE 2.2
NUMBER OF DWELLING UNITS BY TYPE OF BUILDING AND RATE OF OCCUPANCY: 1960, 1970 & 1980

	1960		*1970*		*1980*	
	Occupied	*Un-occupied*	*Occupied*	*Un-occupied*	*Occupied*	*Un-occupied*
Residential						
Single	3,958,597		5,379,692		7,911,102	
Duplex	49,880		144,789		144,024	
Apartment/Accesoria	95,801		213,157		320,569	
Barong-barong	499,097		220,839		84,131	
Sub-total	4,603,375		5,958,477		8,459,826	
Other Purposes						
Commercial, Industrial, Agricultural	37,356[a]		51,361		37,779	
Institutional	–		993		578	
Others	4,215[b]		6		2,643[c]	
Sub-total	41,571		52,360		41,000	
GRAND TOTAL	4,644,946	142,300	6,010,837	89,007	8,500,826	266,818
Occupancy rate	97.0%	3.0%	98.5%	1.5%	97.0%	3.0%

[a]Commercial only.
[b]Industrial, Agricultural and Institutional type of buildings are combined with the type. Others since these constituted less than 0.1% of the dwelling unit inventory.
[c]Includes other housing units like natural shelter, boat, etc., hotel, lodging house, dormitory, etc., and other collective living quarters (military camp, etc.).

Source: 1960 & 1970 Census of Population and Housing, and Special Releases, (1983), NCSO.

From 14,435 units in 1970, the number of barong-barongs went up sharply to 49,159 in NCR. This observation is a reflection of the increasing problem of squatter and slum dwelling which is usually resorted to by people who migrate to Metro Manila in search of better opportunities.

Obviously, Tables 2.3A to 2.3C suggest three major characteristics of housing in the Philippines: a) A major proportion of all occupied dwelling units in each region is composed of single houses with NCR registering the lowest proportion of about 63.6%; b) NCR shows the highest growth rate and proportion of apartment/accessoria units to total occupied dwelling units, although the actual number of apartment units did increase in all the regions over the years; and c) the number of barong-barongs declined in all the regions except in NCR where it sharply increased by more than 200% from 1960 to 1980.

TABLE 2.3A
NUMBER OF OCCUPIED DWELLING UNITS, BY TYPE OF BUILDING & REGION, 1960

REGION	*RESIDENTIAL*				*OTHER PURPOSES*	
	Single	*Duplex*	*Apartment/ Accesoria*	*Barong-Barong*	*Commercial*	*Others*
NCR	301,743	17,366	58,659	15,862	7,862	695
1	445,482	1,872	7,654	22,496	1,761	365
2	161,747	540	150	21,108	1,412	211
3	388,846	2,302	3,281	27,978	2,898	319
4	457,493	3,709	2,432	46,638	3,345	417
5	303,944	2,271	1,243	75,351	3,345	176
6	470,644	4,175	3,578	40,421	2,627	209
7	404,827	1,985	2,101	43,549	3,118	803
8	299,004	1,918	1,098	66,828	2,075	120
9	173,358	2,108	2,263	41,146	1,719	281
10	210,525	3,566	2,680	27,275	2,812	191
11	249,115	4,182	4,131	59,678	3,486	334
12	91,869	3,886	6,531	10,767	672	93

Source: 1960 Census of Population and Housing, NCSO.

The distribution of housing by sector in the 70s is still reflective of the concentration of the Philippine population in the rural areas. 69.6% of the country's total occupied housing stock were in the rural

TABLE 2.3B
NUMBER OF OCCUPIED DWELLING UNITS, BY TYPE OF BUILDING & REGION, 1970

REGION	*RESIDENTIAL*				*OTHER PURPOSES*		
	Single	*Duplex*	*Apartment/ Accesoria*	*Barong-Barong*	*Commercial Industrial Agricultural*	*Institutional*	*Others*
NCR	397,668	62,824	147,890	14,435	9,570	306	–
1	470,862	5,261	11,029	19,861	1,921	108	–
2	280,858	3,017	1,090	8,857	2,310	33	1
3	551,662	9,532	14,361	11,731	4,077	84	–
4	620,351	10,376	7,940	54,032	5,369	95	2
5	445,260	3,938	2,087	21,396	3,971	42	–
6	552,403	9,808	4,512	20,775	3,603	43	–
7	500,473	6,206	4,816	11,772	3,282	70	–
8	377,897	4,906	1,612	26,613	2,233	37	2
9	284,198	4,828	2,831	5,450	2,782	18	1
10	289,634	6,420	3,968	9,644	3,549	46	–
11	326,639	9,047	6,079	9,418	5,702	78	–
12	281,797	8,626	4,942	6,855	2,992	33	–

Source: 1970 Census of Population and Housing, NCSO.

TABLE 2.3C
NUMBER OF OCCUPIED DWELLING UNITS, BY TYPE OF BUILDING & REGION, 1980

REGION	*Total*	*Single*	*Duplex*	*Apartment/ Accesoria*	*Barong-Barong*	*Commercial Industrial Agricultural*	*Institutional*	*Others**
NCR	1,062,174	710,285	51,647	239,131	49,159	11,324	259	369
1	639,186	615,340	4,982	14,229	1,462	1,796	68	309
2	400,414	394,573	1,982	1,658	637	1,156	24	384
3	829,699	788,640	11,523	19,426	5,586	3,839	42	643
4	1,099,172	1,049,743	20,578	17,025	7,801	3,799	41	185
5	601,871	591,077	2,899	2,369	2,914	2,537	26	49
6	781,474	766,474	8,364	2,926	1,553	2,084	14	59
7	696,533	681,811	4,655	5,394	2,750	1,813	33	77
8	509,720	503,814	2,496	1,344	1,067	965	7	27
9	433,928	421,453	7,357	2,129	1,898	990	27	74
10	476,819	462,977	6,994	3,260	1,953	1,513	13	109
11	588,525	556,526	11,900	9,640	6,067	4,103	15	274
12	381,311	368,389	7,647	2,038	1,284	1,860	9	84

*Includes other housing units iike natural sheiter, boat, etc., hotel lodging house, dormitory, etc., and collective living quarters (military camp, etc.)

Source: Special Releases 1983, NCSO.

areas as of 1970 (see Table 2.4). The next decade did not see a big change in the distribution despite the faster pace of urbanization. In 1980, this proportion went down slightly to 62.8%. In both periods considered and for all the regions in the country except NCR, the single type dwelling units are mostly located in the rural areas while there are more apartment and duplex units in urban areas. A dramatic change is observed in the barong-barongs, the number in urban areas of which far exceeded those in the rural areas in 1980, which in 1970 was just the opposite. The big jump is easily attributable to the fast rise in the number of urban dwellers in Metro Manila who migrate from the provinces and who end up squatting and putting up shanties and makeshifts of scrap materials along the fringes of the metropolis.

Another characteristic of the housing market which is important especially in relation to the problem of control is the type of occupancy existing in the occupied units. This information is given in Table 2.5. Three major types of occupancy are considered, namely, owner-occupied, rented only and rent free. Some reclassification was done especially for the 1970 data since a more detailed classification with combinations of the three major types was used. Obviously, the period 1960-1980 was marked by a very sharp expansion in the rented sector amounting to 251.8%. The other two types also experienced an increase with owner-occupied units going up by 67.2% and rented-free units by 138.1%. From a 6.4% share of total occupied units in 1960, the rented sector's share has evidently grown continuously to 8.5% in 1970 and 12.3% in 1980. The rent-free sector did not show a consistent trend having contracted in 1970 from 5.7% to 3.8% and having grown in 1980 to 7.4%. Finally, the share of owner-occupied units slightly declined from 87.9% in 1960 to 87.7% in 1970. This further went down to 80.3% in 1980.

The rented sector's expansion is accounted for mainly by NCR. With the region's share of the country's rented sector remaining at more than 50% on the average, actual number of rented units in NCR increased by 194.5% from 1960 to 1980. Region 4 also had the biggest share of owner-occupied units for all the periods considered.

Housing Needs

A simple measure of housing need is developed in this study. It is more limited in definition and does not consider occupancy density standard, hence, may be understated compared with other measures developed earlier. For example, the United Nations suggests the

TABLE 2.4A
NUMBER OF OCCUPIED DWELLING UNITS, BY TYPE OF BUILDING & REGION, RURAL & URBAN, 1970

REGION	*TOTAL*	*Single*	*Duplex*	*Apartment/ Accesoria*	*Barong-Barong*	*Commercial Industrial Agricultural*	*Institutional*	*Others*
NCR*	632,693	397,668	62,824	147,890	14,435	9,570	306	–
1								
Rural	416,706	389,911	3,299	6,242	16,717	515	22	–
Urban	92,336	80,951	1,962	4,787	3,144	1,406	86	–
2								
Rural	256,926	245,614	1,522	526	8,180	1,066	17	1
Urban	39,240	35,244	1,495	564	677	1,244	16	–
3								
Rural	402,284	387,735	3,340	2,094	8,032	1,055	28	–
Urban	189,163	163,927	6,192	12,267	3,699	3,022	56	–
4								
Rural	503,291	449,930	3,867	1,200	46,704	1,555	34	1
Urban	194,874	170,421	6,509	6,740	7,328	3,814	61	1
5								
Rural	390,432	366,536	1,857	464	19,694	1,864	17	–
Urban	86,262	78,724	2,081	1,623	1,702	2,107	25	–
6								
Rural	447,659	421,813	5,473	1,354	18,046	961	12	–
Urban	143,485	130,590	4,335	3,158	2,729	2,642	31	–

TABLE 2.4A (Continued)

REGION	TOTAL	Single	Duplex	Apartment/ Accesoria	Barong-Barong	Commercial Industrial Agricultural	Institutional	Others
7								
Rural	391,514	377,763	2,019	613	10,171	940	8	–
Urban	135,105	122,710	4,187	4,203	1,601	2,342	62	–
8								
Rural	337,603	312,527	2,258	450	21,385	963	18	2
Urban	75,697	65,370	2,648	1,162	5,228	1,270	19	–
9								
Rural	256,617	246,013	2,921	1,281	4,978	1,411	12	1
Urban	43,491	38,185	1,907	1,550	472	1,371	6	–
10								
Rural	251,438	236,186	3,249	1,552	8,828	1,601	22	–
Urban	61,823	53,448	3,171	2,416	816	1,948	24	–
11								
Rural	266,532	250,070	3,724	2,099	8,574	2,038	27	–
Urban	90,421	76,559	5,323	3,980	844	3,664	51	–
12								
Rural	263,238	246,102	6,436	2,914	6,464	1,301	21	–
Urban	42,007	35,695	2,190	2,028	391	1,691	12	–
PHIL.								
Rural	4,184,240	3,930,200	39,965	20,789	177,773	15,270	238	5
Urban	1,826,597	1,449,492	104,824	192,368	43,066	36,091	755	1

*Urban in its entirety.

Source: 1970 Census of Population and Housing, NCSO.

TABLE 2.4B
NUMBER OF OCCUPIED DWELLING UNITS[a], BY TYPE OF BUILDING & REGION, RURAL & URBAN, 1980

REGION	*TOTAL*	*Single*	*Duplex*	*Apartment/ Accesoria*	*Barong-Barong*	*Commercial Industrial Agricultural*	*Institutional*	*Others**
NCR**	1,062,174	676,458	56,313	241,178	74,227	12,010	540	1,448
1								
Rural	488,788	469,919	3,748	10,076	4,256	445	74	270
Urban	150,398	137,786	3,966	4,667	1,976	1,655	111	237
2								
Rural	340,107	332,506	2,013	1,224	3,136	541	20	667
Urban	60,307	56,049	973	1,310	797	1,103	30	45
3								
Rural	475,938	455,751	5,326	3,327	10,549	577	39	369
Urban	353,761	312,824	9,238	18,724	8,092	3,890	166	827
4								
Rural	694,031	667,570	7,630	2,166	14,826	1,300	66	473
Urban	405,151	352,245	19,104	17,866	11,909	3,433	97	487
5								
Rural	473,886	458,467	1,848	480	12,044	710	40	297
Urban	127,985	117,427	3,115	2,373	2,284	2,598	69	119
6								
Rural	568,108	558,282	6,263	869	2,153	361	18	162
Urban	213,366	199,835	6,219	2,767	1,681	2,616	61	187
7								
Rural	480,794	472,789	2,291	1,157	3,935	477	5	140
Urban	215,739	198,773	5,505	5,717	3,431	2,088	65	160

8								
Rural	403,517	395,813	2,985	606	3,648	309	21	135
Urban	106,203	100,020	2,282	1,295	1,489	979	28	110
9								
Rural	361,878	351,307	5,649	1,130	3,160	256	18	358
Urban	72,050	64,006	4,608	1,218	920	1,149	37	112
10								
Rural	351,422	340,894	4,454	853	4,448	413	14	346
Urban	125,397	111,193	6,709	3,600	1,642	1,714	86	453
11								
Rural	390,011	371,548	4,460	4,241	8,643	829	10	280
Urban	198,514	171,765	11,459	6,321	4,912	3,413	493	151
12								
Rural	311,929	299,226	8,423	1,255	2,406	490	33	96
Urban	69,382	62,366	3,332	1,144	748	1,601	49	142
PHIL.								
Rural	5,340,409	5,174,072	55,090	27,384	73,204	6,708	358	3,593
Urban	3,160,417	2,560,747	132,823	308,180	114,108	38,249	1,832	4,478
TOTAL	8,500,826	7,734,819	187,913	335,564	187,312	44,957	2,190	8,071

*Includes other housing units like natural shelter, boat, etc., hotel lodging house, dormitory, etc., and other collective living quarters (military camp, etc.).

**Urban in its entirety.

Source: 1980 Census of Population and Housing, NCSO.

[a]These figures were estimated using the number of dwelling units per household by sector and region since no detailed data by sector for 1980 were available at the time the study was conducted.

TABLE 2.5A
NUMBER OF OCCUPIED DWELLING UNITS
BY TYPE OF OCCUPANCY AND REGION, 1960

Region	*Owner – Occ.*	*Percent*	*Rented Only*	*Percent*	*Rent Free*	*Percent*
NCR	211,107	5.2	170,341	57.4	20,739	7.9
1	445,745	10.9	13,359	4.5	20,526	7.8
2	177,427	4.3	2,255	0.8	5,486	2.1
3	395,448	9.7	14,303	4.8	15,873	6.0
4	466,885	11.4	16,403	5.5	30,970	11.8
5	358,222	8.8	9,236	3.1	18,872	7.2
6	464,912	11.4	12,586	4.2	44,156	16.8
7	428,011	10.5	14,985	5.1	13,387	5.1
8	348,994	8.5	8,993	3.0	13,056	4.9
9	200,346	4.9	7,162	2.4	13,367	5.1
10	220,378	5.4	10,381	3.5	16,291	6.2
11	288,365	7.1	13,681	4.6	18,880	7.2
12	79,001	1.9	2,912	1.0	31,905	12.1
PHIL.	4,084,841	100.0	296,597	100.0	263,508	100.0

Source: 1960 Census of Population and Housing, NCSO.

following principal components of housing needs for a particular period:

> (1) The number of dwelling units required for households without shelter, households occupying living quarters of an unacceptable type, households involuntarily doubled-up with other households in living quarters of an acceptable type, and for reduction in levels of density in acceptable living quarters to a desired level; and
>
> (2) number of living quarters which are of an acceptable type but in need of repair or replacement.[1]

Obviously, it is difficult to use this definition on account of the very limited housing data we have at present.

The definition of housing need used here is the number of dwelling units required for households who are occupying structures which are not intended or not suitable for human habitation plus the number of dwelling units needed to achieve the ideal condition

1. See Ramos (1980), p. 2.

TABLE 2.5B
NUMBER OF OCCUPIED DWELLING UNITS
BY TYPE OF OCCUPANCY AND REGION, 1970

Region	*Owner – Occ.*	*Percent*	*Rented Only*	*Percent*	*Rent Free*	*Percent*
NCR	302,722	5.7	299,953	58.7	30,018	13.2
1	479,521	9.1	14,600	2.8	14,921	6.6
2	285,734	5.4	4,880	0.9	5,552	2.4
3	541,405	10.3	35,718	6.0	14,324	6.3
4	642,830	12.2	30,035	5.9	25,300	11.1
5	452,806	8.6	11,820	2.3	12,068	5.3
6	534,747	10.1	15,587	3.0	40,810	7.0
7	490,048	9.3	23,594	4.6	12,977	5.7
8	392,298	7.4	10,088	1.0	10,914	4.8
9	280,096	5.3	9,629	1.9	10,383	4.6
10	281,865	5.3	16,216	3.2	15,180	6.7
11	312,846	5.9	27,360	5.4	16,747	7.4
12	275,796	5.2	11,682	2.3	17,767	7.8
PHIL.	5,272,714	100	511,162	100	226,961	100

Source: 1970 Census of Population and Housing, NCSO.

of one household occupying one dwelling unit, i.e., no doubled-up households.

Tables 2.6A and 2.6B provide information on the total housing need in 1970 and 1980. A total of 698,689 dwelling units were needed in 1970 to enable each household in the country to occupy an acceptable housing unit. This served as backlog in addition to the need for more units brought about by the increase in the number of households in the 80s. However, it seems that the housing sector improved especially with the introduction of more innovative shelter programs since a remarkable decline of 49.0% was registered in the measure of need in 1980. The number of households in occupied dwelling units had gone up by 39.6% and total acceptable dwelling units had risen faster by 46.8%.

In terms of the regional distribution of this gap between the supply of acceptable dwelling units and the actual need, Region 4 took the lead in 1970 followed by NCR. Region 9 had the least need for housing during the same period. In 1980, except for NCR which

TABLE 2.5C
NUMBER OF OCCUPIED DWELLING UNITS
BY TYPE OF OCCUPANCY AND REGION, 1980

Region	*Owner - Occ.*	*Percent*	*Rented Only*	*Percent*	*Rent Free*	*Percent*
NCR	449,905	6.6	501,725	48.1	110,544	17.6
1	566,384	8.3	30,539	2.9	42,263	6.7
2	364,269	5.3	15,350	1.5	20,795	3.3
3	697,036	10.2	80,394	7.7	52,269	8.3
4	926,128	13.6	98,671	9.4	74,373	11.8
5	533,810	7.8	36,119	3.5	31,942	5.1
6	659,617	9.6	47,126	4.5	74,731	11.9
7	611,188	8.9	50,201	4.8	35,144	5.6
8	459,693	6.7	22,772	2.2	27,255	4.3
9	374,386	5.5	29,466	2.8	30,076	4.8
10	398,534	5.8	38,909	3.7	39,376	6.3
11	469,341	6.9	66,667	6.4	52,517	8.4
12	319,630	4.7	25,614	2.4	36,067	5.7
PHIL.	6,829,919	100	1,043,552	100	627,349	100

Source: 1970 Census of Population and Housing, NCSO.

experienced a deterioration in its housing situation with total need increasing by 86.3%, the rest of the regions saw the narrowing of the gap by an average of 67.4%. This clearly suggests the concentration of unacceptable dwelling units and doubled-up families in NCR during the 80s.

To confirm this we look at the occupancy rate which is defined here as the ratio of households to occupied dwelling units and the number of persons per dwelling unit (see Tables 2.7A and 2.7B). In 1970, there were 1,026 households for every 1,000 dwelling units for the whole Philippines. This figure suggests that there were on the average 26 households who were doubling-up with other households. On the average also, there were about 6 persons to a dwelling unit. The situation is even more difficult if we do not allow occupancy in unacceptable dwelling units (as defined in this study). This means that 74 households would have had to double-up accommodation. This would have meant more persons occupying a dwelling unit. At the regional level, overcrowding is evident in NCR with an occupancy

TABLE 2.6A
PHILIPPINE HOUSING NEED BY REGION, 1970

Region	*# DU*	*# DU**	*DU-DU**	*# HH*	*HH-DU**	*(DU-DU*) + (HH-DU*)*
NCR	632,693	608,382	24,311	671,901	63,519	87,830
1	509,042	487,152	21,890	524,259	37,107	58,997
2	296,166	294,965	11,201	302,590	17,625	28,826
3	591,447	575,555	15,892	600,592	25,037	40,929
4	698,165	638,667	59,498	712,052	73,385	132,883
5	476,694	451,285	25,409	482,442	31,157	56,566
6	591,144	566,723	24,421	603,408	36,685	61,106
7	526,619	511,495	15,124	531,590	20,095	35,219
8	413,300	384,415	28,885	416,948	32,533	61,418
9	300,108	291,857	8,251	308,742	16,885	25,136
10	313,261	300,022	13,239	319,716	19,694	32,933
11	356,953	341,755	15,198	364,846	23,091	38,289
12	305,245	295,365	9,880	324,042	28,677	38,557
PHIL.	6,010,837	5,737,638	273,199	6,163,128	425,490	698,689

*Does not include barong-barong and non-residential buildings.

Source: 1970 Census of Population and Housing, NCSO.

rate of 1,062 to 1,000 dwelling units and an average of 7 persons occupying a dwelling unit.

A better picture is presented by the figures in 1980 with the occupancy rate going down to 1,012 households per 1,000 dwelling units and the number of persons to a unit going down to about 5. Similar declines are observed in all the regions, with NCR still remaining the region with the most number of doubled-up families.

Family Income and Expenditures for Housing

The share of housing to total family expenditures has in the 70s remained the second or third largest among several items considered, the major ones of which are food and clothing (Table 2.8). Its share has gone up from 9.4% in 1971 to 10.1% in 1979. If we consider other housing-related items like furnishing and equipment, household operations and fuel, light and water, we notice a decreasing share of these items over the years except for fuel, light and water whose

TABLE 2.6B
PHILIPPINE HOUSING NEED BY REGION, 1980

Region	*# DU*	*# DU**	*DU-DU**	*# HH*	*HH-DU**	*(DU-DU*) + (HH-DU*)*
NCR	1,062,174	1,001,063	61,111	1,103,563	102,500	163,611
1	639,186	635,551	3,635	651,070	15,519	19,154
2	400,414	398,213	2,201	404,037	5,824	8,025
3	829,699	819,589	10,110	838,045	18,456	28,566
4	1,099,172	1,087,346	11,826	1,107,031	19,685	31,511
5	601,871	596,345	5,526	603,807	7,462	12,988
6	781,474	777,764	3,710	786,881	9,117	12,827
7	696,533	691,860	4,673	698,105	6,245	10,918
8	509,720	507,654	2,066	511,107	3,453	5,519
9	433,928	430,939	2,989	438,878	7,939	10,928
10	476,819	473,231	3,588	479,504	6,273	9,861
11	588,525	578,066	10,459	591,896	13,830	24,289
12	381,311	378,074	3,237	393,263	15,189	18,426
PHIL.	8,500,826	8,375,695	125,131	8,607,187	231,492	356,623

*Does not include barong-barong and non-residential buildings.

Source: 1980 Census of Population and Housing, NCSO.

share increased in 1975. Total share of these items consistently decreased from 17.7% in 1971 to 15.1% in 1979.

As a proportion of total personal consumption expenditures, the share of housing expenditures has been going up (Table 2.9). From 17.7% in 1977, it has consistently increased to 18.6% in 1980, with fuel, light and water accounting for most of the increase.

The distribution of income as of 1979 reveals the existence of still a large proportion of the population belonging to the low and middle income classes. Table 2.10 reveals that more than 50% of total households receive annual incomes of less than ₱6,000, which on a monthly basis, would amount to only ₱500 or less a month. Following the categories used by Osorio (1983),[2] about 88% of total

2. The following income classification is used in Osorio (1983):
   1. low – less than ₱4,000.
   2. middle – ₱4,000 but less than ₱20,000.
   3. high – ₱20,000 but less than ₱100,000.
   4. very high – ₱100,000 and over.

households belong to the low and middle income groups, with the former accounting for about 36% of the total.

Housing Cost

The capability of households to afford house construction is not only determined by their level of income and their ability to borrow. Equally important is the price of housing made available to prospective homeowners or renters, and this is to a great extent determined by the cost of constructing a housing unit.

Cost of housing has evidently gone up as shown in Table 2.11. For the whole Philippines, and for all types of units, the cost per square meter was ₱454 in 1977 and this went up to ₱1,101 in 1983, registering an increase of 142.5%. A similar trend is observed in all the regions with NCR posting the highest cost per square meter. Very sharp increases in cost are also noticed in most of the regions. Excluding NCR, the average cost per square meter for the twelve regions in

TABLE 2.7A
OCCUPANCY RATE AND NUMBER OF PERSONS PER DWELLING UNIT BY REGION, 1970

Region	*HH per 1,000 DU*	*HH per 1,000 DU**	*POP/DU*	*POP/DU**
NCR	1,062	1,104	6.7551	7.0251
1	1,038	1,076	5.9214	6.1389
2	1,022	1,062	5.7134	5.9380
3	1,015	1,044	6.1130	6.2818
4	1,020	1,115	5.9429	6.4965
5	1,012	1,069	6.2239	6.5743
6	1,021	1,065	6.1209	6.3846
7	1,009	1,039	5.7588	5.9291
8	1,009	1,085	5.7619	6.1949
9	1,029	1,058	6.5610	6.4039
10	1,021	1,066	6.2336	6.5086
11	1,022	1,068	6.1653	6.4395
12	1,062	1,097	6.3603	6.5731
PHIL.	1,026	1,074	6.1071	6.3936

*Does not include barong-barong and non-residential buildings.

Source: 1970 Census of Population and Housing, NCSO.

TABLE 2.7B
OCCUPANCY RATE AND NUMBER OF PERSONS PER DWELLING UNIT BY REGION, 1980

Region	*HH per 1,000 DU*	*HH per 1,000 DU**	*POP/DU*	*POP/DU**
NCR	1,039	1,102	6.1020	6.4745
1	1,019	1,024	5.5397	5.5714
2	1,009	1,015	5.5331	5.5637
3	1,010	1,022	5.7886	5.8600
4	1,007	1,018	5.0612	5.1162
5	1,003	1,012	5.7770	5.8305
6	1,007	1,012	5.7911	5.8187
7	1,002	1,009	5.4375	5.4740
8	1,003	1,007	5.4923	5.5164
9	1,011	1,018	5.8270	5.8674
10	1,006	1,013	5.7862	5.8301
11	1,006	1,024	5.6868	5.7896
12	1,031	1,040	5.9556	6.0066
PHIL.	1,012	1,028	5.6581	5.7426

*Does not include barong-barong and non-residential buildings.

Source: 1980 Census of Population and Housing, NCSO.

1977 was only about ₱299. This increased sharply to ₱938 in 1983. In NCR, this cost figure moved from ₱629/sq. meter in 1977 to ₱1,196/sq. meter in 1983, a jump of about 90%. Cost figures by type of building generally exhibit the same behavior (see Annexes B1 to B3).

In the rented sector, rental prices have also been increasing. The rental price index for NCR indicates a continuous increase from 1972 to 1983 (Table 2.12) with an average rate of 11.8%. High rates of increase are observed especially in 1973-1974 and 1981-1983 periods. These periods marked the onset of the two oil shocks which brought about rapid increases in commodity prices, including construction materials. We notice from Table 2.12, for example, the very sharp increases in the price index of construction materials and in the price index of housing repairs in Table 2.13. These changes undoubtedly brought about the increase in the cost of housing and rental prices.

TABLE 2.8
PERCENT DISTRIBUTION OF TOTAL HOUSEHOLD EXPENDITURE BY ITEM OF EXPENDITURE, 1971, 1975 AND 1979

Item	*Percent Distribution*	*Rank*	*Percent Distribution*	*Rank*	*Percent Distribution*	*Rank*
Food	53.7	1	57.0	1	31.3	1
Clothing, Footwear and other wear	6.2	3	7.5	3	3.7	7
Alcoholic beverages	—	—	—	—	0.7	14
Tobacco, cigarette	—	—	—	—	0.8	13
Housing	9.4	2	8.5	2	10.1	3
Housing Furnishing and Equipment	2.3	9	1.9	9	1.3	11
Household Operations	2.4	8	2.1	7	1.1	12
Fuel, light & water	3.6	5	4.6	4	2.6	8
Personal Care	1.6	11	1.8	10	0.5	16
Medical Care	1.8	10	1.9	9	2.2	9
Transport and communication	2.9	6	3.4	6	5.1	5
Recreation	1.8	10	1.4	12	0.8	13
Education	3.7	4	4.0	5	3.9	6
Gifts, contributions and Assistance to outsiders	0.6	13	0.4	14	25.3	2
Taxes paid	0.3	14	1.0	13	1.5	10
Special occasions of family	2.5	7	2.0	8	1.5	10
Personal Effects	0.6	13	1.0	13	0.2	17
Miscellaneous goods and services	1.5	12	1.5	11	8.9	4
Others	—	—	—	—	—	—
TOTAL	100.0			100.0	100.0	

Source: NCSO and Osorio, Nieves, 1983, "The 1979 Diary Family Income and Expenditure Survey: Experience and Preliminary Results," *Journal of Philippine Development,* Vol. X, No. 1, 1st sem., p. 150.

However, one observation needs to be raised at this point. Despite the big jump in the housing repair index, the rate of increase in the cost of housing is tremendously higher than the rate of increase in rental prices. This may have been brought about by the rent

TABLE 2.9
PERCENTAGE SHARE OF HOUSING EXPENDITURES TO TOTAL PERSONAL CONSUMPTION EXPENDITURES, 1977-1980

Item	*1977*	*1978*	*1979*	*1980*
TOTAL	17.7	17.9	17.2	18.6
Housing	7.4	7.4	7.5	7.4
Fuel, Light and Water	3.0	3.1	3.3	3.8
Household Furnishing and Equipment	4.9	4.3	4.8	4.7
Household Operations	2.4	2.6	2.6	2.7

Source: ESIA/WID, Social Development in the Philippines 1970-1980, P. 172.

TABLE 2.10
PERCENT DISTRIBUTION OF HOUSEHOLDS BY INCOME LEVELS, 1979

Annual Income	*Distribution*	*Cumulative Percentage*
Less than 2,000	15.65	15.65
2,000 – 3,999	20.58	36.23
4,000 – 5,999	16.56	52.79
6,000 – 7,999	10.01	62.80
8,000 – 9,999	8.23	71.03
10,000 – 19,999	16.68	87.71
20,000 – 29,999	5.17	92.88
30,000 – 49,999	4.14	97.02
50,000 – 59,999	0.85	97.87
60,000 – 79,999	0.79	98.66
80,000 – 99,999	0.48	99.14
100,000 – 199,999	0.53	99.67
200,000 – 499,999	0.19	99.86
500,000 – 999,999	0.06	99.92
1,000,000 and over	0.01	99.93

Source: Nieves Osorio, "The 1979 Diary Family Income and Expenditure Survey: Experience and Preliminary Results," in *Journal of Philippine Development,* Vol. X, No. 1, 1st sem. 1983, p. 148.

TABLE 2.11
TOTAL NUMBER AND COST PER SQUARE METER OF RESIDENTIAL BUILDINGS CONSTRUCTED BY REGION, 1977-1983

	1977		*1978*		*1979*		*1980*		*1981*		*1982*		*1983**	
	Total #	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*
Region I	1,957	333	683	447	1,092	645	916	840	1,172	877	1,021	891	722	957
Region II	949	247	295	495	480	616	771	759	517	854	439	865	296	897
Region III	1,569	370	1,122	562	2,058	672	1,807	862	2,322	862	2,744	1,022	1,659	1,027
Region IV	3,772	394	1,713	595	2,384	729	2,897	845	2,856	943	2,875	1,102	2,058	1,075
Region V	788	264	406	451	545	611	628	733	598	883	472	925	496	1,051
Region VI	1,243	330	1,174	502	1,249	618	1,182	782	1,091	875	805	883	525	927
Region VII	1,922	407	865	501	1,468	606	1,009	697	1,407	807	1,465	800	738	808
Region VIII	1,275	170	493	489	741	556	842	715	897	758	684	770	514	1,039
Region IX	1,006	235	676	496	807	641	798	748	589	756	395	841	237	839
Region X	2,096	257	785	387	1,195	515	1,236	688	1,292	716	930	766	483	745
Region XI	1,534	293	1,228	523	1,781	735	1,484	833	2,513	853	2,942	1,127	1,715	983
Region XII	677	290	417	397	756	611	1,536	771	613	780	487	812	288	911
NCR	4,295	629	4,868	755	7,197	956	8,834	1,066	7,910	1,180	11,092	1,201	7,858	1,196
Philippines	23,083	454	14,725	6,317	21,753	786	23,940	916	23,777	1,000	26,351	1,093	17,589	1,101

*For the first two quarters only.

Source: Construction Division, NCSO.

TABLE 2.12
RENTAL INDEX, NCR
1972-1983

Year	*Index*	*Growth Rate*
1972	57.0	
1973	68.0	19.3
1974	78.3	15.1
1975	83.4	6.5
1976	87.2	4.5
1977	93.4	7.1
1978	100.0	13.2
1979	113.2	8.8
1980	123.2	12.0
1981	138.0	17.0
1982	162.7	17.9
1983	191.6	17.8
		Ave: 11.8

Source: NCSO.

TABLE 2.13
PRICE INDEX OF HOUSING REPAIRS
(1972 = 100)

Year	*Price Index*
1972	100.0
1973	127.6
1974	174.1
1975	182.1
1976	218.5
1977	254.8
1978	272.8
1979	337.7

Source: NCSO.

control law[3] which has remained in operation until today. The maximum annual increase of 10% of all units being leased at ₱300 and below provided by the rent control policy has definitely hampered the increase in rental prices dictated by the market. Likewise, the prolonged effectivity of the rent regulation may have resulted in the undermaintenance of apartment units which when vacated will definitely not command the market rental rate.

The discussion presented above provides us a clear perspective of the housing situation in the Philippines. This enables us to identify the problems which confront the sector today, as well as their underlying causes. The following problems of housing clearly surfaced:

a) there is a significant amount of backlog in housing and unless a faster rate of construction and improvement activities is undertaken, an increasingly wider gap between housing need and supply will occur;
b) most of our people still earn very low incomes to allow them to acquire housing or to borrow; and
c) housing cost is increasing very rapidly thereby making housing less and less affordable especially to the low income families.

3. P.D. No. 20 in effect froze monthly rentals of dwelling units leased at ₱300 per month and below. Batas Pambansa Blg. 25 further extended the effectivity of P.D. No. 20 for a duration of five years beginning April 1979 but allowing the annual increase of 10%.

CHAPTER 3

THE DEMAND FOR HOUSING IN THE PHILIPPINES

Past studies on housing in the Philippines have focused mainly on the estimation of housing need.[4] Very few attempts to analyze the demand for housing have been recorded and if there are, they are limited to simple comparisons of households' incomes and the current cost of dwelling units (Tan, 1979) signifying the affordability levels of households. To date, no empirical work is available which analyzes how people's demand for housing responds to changes in income and prices. Information on these two variables and their effects on housing demand are considered extremely important in drawing up policies directed at offering massive low-cost housing and providing subsidies to low-income families. While such importance is recognized, the need for technical information remains unfulfilled mainly because of the unavailability of appropriate data as well as the complexity of the concept of housing, which renders it difficult to study.

It is the purpose of this part of the study to investigate the effect of changes in income on the demand for housing using household survey data. The next section reviews and discusses past studies mostly done in the United States, and some conceptual issues. Finally, the last section presents the data, the analytic model and the results.

Review of Past Studies and Some Theoretical and Methodological Issues

Considered as major determinants of demand for housing are income and housing prices. The estimation of income and price elasticities are therefore the focus of most demand for housing analyses.

4. NEDA broadly defines housing need as the quantity of dwelling units that still have to be constructed to provide each household or family with a separate dwelling. Also included in this definition are the dwelling units needed to replace those considered unsuitable for occupancy (i.e., dilapidated "barong-barong").

Past studies of the demand for housing reveal a wide margin of uncertainty about the responsiveness of the demand for housing with respect to changes in income and prices. For example, estimates of the income elasticity of the demand for housing in the US range from 0.4 to 2.1 (de Leeuw, 1971). This wide range makes it difficult to draw definite conclusions as to whether the demand is elastic or inelastic with respect to income, more so to justify the introduction of specific housing policies as well as make conclusions about past policies.

Inconsistency of results has been a problem even as early as the 1960s (Winger, 1968) and has been mainly attributed to the differing notions of the nature of the fundamental relationship between two variables. Winger (1968) points out the case of studies using models assuming a direct relationship between income and housing which is deemed inappropriate when the focus is on the housing consumption of homeowners. Current housing expenditures are largely a reflection of a decision made sometime in the past when the house was purchased. This decision is to a large extent affected by the availability and cost of mortgage credit at the time the decision to buy a house is made and so Winger proposes the inclusion of credit factors in the analysis, distinct and separate from income.

A more fundamental problem involves the operational definition of housing service which is oftentimes used very loosely in studies on housing. Olsen (1969) suggests that this concept, basically an unobservable theoretical entity, refers to the good which each dwelling (or housing) unit yields per unit of time and to which consumers attach value. A dwelling unit on the other hand is a package composed of a certain quantity of capital asset called housing stock. Taken in this context, Olsen argues that if "we observe that one dwelling unit sells for twice the amount of another dwelling unit in the same market, then we say that the more expensive unit contains twice the quantity of housing stock and, hence, involves twice the total expenditure" (Olsen, 1971, p. 64). Similarly, in the case of a dwelling unit which rents for twice the amount of another dwelling unit, it follows that the more expensive dwelling unit yeilds twice the quantity of housing service per time period and, hence, involves twice the total expenditure per time period. These definitions would allow researchers to compare the relative amounts of housing service yielded by different dwelling units despite the fact that these two concepts are not directly observable, and hence not directly quantifiable.

More recent studies, however, point to two major problems which account for the existence of the different values obtained for income and price elasticities. One is the use of current measured income in the analysis instead of the permanent or long-run expected income, which, as has been pointed out in many studies, underestimates the value of the income elasticity (e.g., Carliner, 1973; Lee and Kong, 1977; de Leeuw, 1971). The other problems arises from the use of grouped instead of micro household observations in the cross-section analyses of housing demand. The use of grouped data, although primarily employed to avoid the problem encountered in using current income, results in various aggregation biases in estimating demand elasticities (see Lee, 1968; Vaughn, 1976; Polinsky, 1976; Maisel et al., 1971).

Other methodological problems pointed out in housing demand studies include the possible exclusion of movers in the sample being analyzed and the non-treatment of imputed rent in measures of homeowner income. Specifically, de Leeuw (1971) expresses skepticism over the results of some studies (i.e., Lee, 1963) because of this problem. Likewise, Carliner (1973) argues that it seems plausible that families who have not changed their house might have experienced changes in their permanent income and that therefore the correlation between income and housing consumption might be lower for non-movers than for movers.

An attempt to reconcile these varying results by introducing some adjustments specifically in relation to the concepts and population used in different studies is the work of de Leeuw (1971). The omission of rental value of homes from homeowner's income, for example, results in a bias in the elasticity estimate for homeowners, away from 1.[5] Hence, if the true elasticity is less than one, the omission of rental value will tend to reduce the estimated elasticity below the true value, while if it is above one, the omission of rental value will tend to raise the estimated elasticity above the true value.

Likewise, he proposes an adjustment of 15 to 20 percent to convert elasticities of market value to elasticities of annual housing expense with respect to income. Hence, Muth's (1960) estimated income elasticity of 1.68 is adjusted to the neighborhood of 1.35. Other studies are also considered (e.g., Winger, 1968; Reid, 1962; Lee, 1968) and similar adjustments are introduced rendering the esti-

5. De Leeuw estimates this bias to amount to 10 times the difference between the estimated elasticity and 1.0 in percentage terms. For a detailed discussion of the derivation of the formula, please see De Leeuw (1971), p. 3.

mated income elasticity for rental housing in the United States to fall within the range of 0.8 to 1.0. For owner-occupants, corrected estimates range from 0.7 to 1.5.

Another work done along this line is by Polinsky (1977). He tries to explain differences in results in terms of specification errors. He mentions in particular the biases inherent in the income elasticity estimated when the price variable term in the demand equation is omitted or misspecified (see Quigley, 1979 for a more detailed discussion of results).

One other methodological innovation which has been tackled especially in the studies of Reid (1962), de Leeuw (1971), Lee and Kong (1977), and Follain et al. (1980) is the separate analysis done for two sub-samples composed of renters and homeowners. The results of these studies consistently indicate that the income elasticity for owner-occupied housing is higher than that for rental housing.

Similar problems are encountered in the estimation of the price elasticity of demand, the major one of which is the measurement of the price variable itself. In the housing market, "prices" are not directly observable. Market transactions do produce monthly rent corresponding to flows of housing service or market values for stocks of housing capital, but neither of these variab'es gives us the price.

Several measures of price are being used in housing demand studies and this partly explains why a wide range of elasticity estimates surface. Quigley (1979) reports this range to be from about –0.3 to –0.9.

While extensive discussions and numerous studies are being undertaken in the United States to improve the validity of price and income elasticity estimates obtained in past studies, very little effort to undertake similar studies is observed in developing countries. This sad state remains unattended despite the greater need for more accurate estimates in this part of the world where more severe housing problems and very scarce resources exist. A noteworthy attempt has, however, been recorded in Korea (Follain et al., 1980) and the results indicate conclusively that both the price and income elasticities of the demand for housing services in Korea are comparable to those found in the United States. The income elasticity is negative and smaller than one in absolute value. This result is intriguing considering the very wide margin in each country's per capita income of $700 for Korea and $7,800 for the United States in 1976. Likewise, the figures obtained can very well serve as points of reference to which Philippine estimates can be compared.

Data and Notations

There is strictly no extensive housing survey in the Philippines which can readily facilitate the analysis of housing demand congruent with the general ideas espoused in past housing studies done in the United States and other countries. What is used in this study is a small survey conducted among members of the Home Development Mutual Fund (or Pag-IBIG) by HDMF during the second quarter of 1983. This specific survey was chosen on account of the detailed questions asked on the economic and financial profile of the Fund members.[6] Also, since the target population of the Government's shelter program are the low and middle-income families, this sample allows the study of the behavior of housing expenditure with respect to changes in income among this group since the members of the Fund are supposedly in the group of low and middle income families.

The survey included 3,457 observations[7] both from the private and government sectors and aside from the economic and financial profile of Fund members, the survey also included questions on the members' knowledge, access to information, and general impression about the Fund. Respondents come from all the regions in the country with NCR classified under Region 4.

For purposes of this study, a sample of 1,344 observations was drawn based on the list of variables included in the analysis. In effect, the observations include only those respondents who gave complete information on the variables under consideration. The list of variables and their notations is shown in Table 3.1.

The Analytic Model

The estimation model utilized in this study draws from a family of models of housing markets. Following Follain et al. (1980) the units of measurement are units of "housing services" and "housing stock". It is assumed that given some amount of operating inputs, each unit of housing stock produces one unit of housing services per unit of time (or per period) (see Follain et al., 1980 and Olsen, 1969). Housing services refer to the sum of all services associated with space or shelter privacy, security and other features providing comfort

6. The Family Income and Expenditure Survey was initially identified as a major data source. However, the 1979 data were not available when the study was undertaken.

7. This is the number of respondents whose questionnaire sheets were received by the HDMF as of the end of July 1983. An original sample of 11,000 was generated through systematic random sampling using the existing membership of the Fund. However, only 31% mailed back the accomplished questionnaire.

TABLE 3.1
LIST OF VARIABLES AND NOTATIONS

R	=	monthly rent for renters; monthly amortization for homeowners who have outstanding mortgage loans which were used for the purchase of the housing unit; imputed rent for homeowners who have no outstanding mortgage loan, where imputed rent is taken as equivalent to the average monthly rent of all renters included in the sample;
FY	=	monthly family income
FC	=	monthly family consumption expenditure
FS	=	monthly family saving
P	=	price
A	=	age
MS_i	=	Marital status; 1 if respondent is married, 0 otherwise
SI	=	a shortage index which is computed as

$$\frac{\text{total number of households} - \text{total number of dwelling units}}{\text{total number of households}}$$

per region j, where $j = 1, \ldots\ldots, 12$

generated or provided by a housing unit.[8] Based on this definition, and given the price per unit of housing services (p), the rent of dwelling unit equals p.q where q refers to the units of housing services produced by the dwelling unit. Similarly, the value of dwelling unit is equal to the price per unit of housing stock (P) times the units of housing stock contained in the dwelling unit (Q). This conceptual framework is consistent with the discussion of Olsen (1971). The rent (p.q) and the value of a dwelling unit (P.Q) therefore represent the expenditure each household or family is willing to incur per unit of time to derive a given amount of housing services. Hence, in a demand for housing model, this expenditure measures the effective demand.

8. A similar conceptual definition was earlier adopted in Follain *et al.* (1980) and NHMFC (1981). The principal developers of this family of models include Mills (1967) and Muth (1960, 1964 and 1971).

Theoretical and empirical studies allude to various factors that determine the demand for housing. The major factors include family income and prices. Other factors, basically socio-demographic, also include age, marital status, location of residence, family size and some proxy variables for possible supply shortages (or excess demand).[9]

A discussion of these variables along the lines suggested in the literature is presented below as a prelude to the analytic model.

Income. Following consumer behavior theory and considering competitive conditions, an increase in income leads to an increase in demand for housing. However, since housing investment involves considerable amount of resources, it is argued that it requires a big amount of increase in income before a significant change in the demand for housing can be observed. In other words, the demand for housing is expected to be highly income inelastic. Others further argue that the elasticity coefficient varies between homeowners and renters (Reid, 1962; de Leeuw, 1971; Follain et al., 1980), with the latter group generally having lower elasticities than the former.

The choice of the appropriate measure of household income has been a source of difficulty in almost all housing demand studies. The argument is that the appropriate measure is not the current rate of income which is easily measured, but rather the long-run or permanent income which is not directly measurable. This is so on account of the fact that income elasticity estimates using current period incomes are downward biased when taken in the context of the permanent income hypothesis (see Theil, 1971; Follain et al., 1980). Besides, even just considering housing's basic characteristics of durability and costliness gives us the impression that the relevant notion of income for analyzing demand is a "normal" or long-run income (Quigley, 1979).

Two alternatives for measuring permanent income are available. One is to use the household level of consumption expenditures and the reason given for this is that consumption level is likely to be a good proxy if it is proportional to permanent income. The other alternative which is popularly suggested is to use grouped household data since transitory components of current income are likely to be cancelled out when households are grouped by factors unrelated to transitory income (Follain et al., 1980). For the purpose of this

9. Family size is not included in the analysis since the survey does not include this variable.

study, the first alternative is used since the variable can be derived directly using the survey data.

Price. Just like any normal good, an increase in the price of housing is expected to reduce the demand for it. Hence we expect a negative effect of price on the demand for housing. More serious problems are encountered in the measurement of the price variable. At the theoretical level, there seems to be some consensus that the measure should reflect the price of the flow of services derived from a given housing stock. However, since this is not directly measurable, different measures of price of housing services are applied in housing demand studies. Some authors use some index representing construction cost (Lee, 1964; Muth, 1960). Others like de Leeuw (1971) and Carliner (1973) use the average cost of an arbitrarily specified dwelling unit to measure price. Still some use appraisal and sale data to derive estimates of unit prices for housing (Muth, 1971; Polinsky and Ellwood, 1979). More recent studies incorporate the estimation of the price variable in a model basically derived from a production function and the standard utility maximization problem (Follain et al., 1980). The estimation procedure then involves calculating the price variable for each household first and then substituting this calculated price into the demand equation to estimate the price and income elasticities.

Three measures of price are used in this study. The first is actually a proxy variable which reflects changes in price on account of excess demand or supply shortage. The other two are more direct measures of price each one used for the two sub-samples composed of homeowners and renters. Average housing cost is used for the farmer and the rental price index for the latter, all given at the regional level.

Demographic Variables (Age and Marital status). Age is expected to have a positive influence on demand. The variable should capture the influence of the possible changes in the desirability of better and more permanent forms of accommodation that come with age. Marital status on the other hand is expected to capture partly the influence of family size and the expected stronger desire for housing that normally comes with marriage.

Shortage Variable. Measured as a ratio of the difference between the number of households and the number of housing/dwelling units to the number of dwelling units in a particular region, this variable hopes to reflect excess demand or supply shortage. In effect, therefore, this variable should be able to catch variations in the price of

housing due to excess demand and hence serve as proxy for the price variable in the demand for housing equation.

The demand equation can be specified as follows:

$$(1)\ ln\ R = \alpha + \beta_1\ ln\ FY + \beta_2 P + \beta_3\ ln\ A + \beta_4\ MS + \beta_5 S$$

where β_1 = income elasticity of demand which is expected to be greater than 0 and less than 1, and β_2 = price elasticity, expected to be less than 0 and 1 in absolute terms.

The use of FY corresponding to measured current income presents theoretical problems so family monthly consumption expenditures are also used to measure long-run income. Actual monthly consumption expenditure is not given directly in the survey. However, monthly family saving figures are given and consumption expenditure is derived as a residual from monthly family income and monthly family savings.

Empirical Results

The estimates of the income and price elasticities are given by the coefficients of the income and consumption expenditure and price terms since these variables are in logarithm form. The results of the regressions are given in Tables 3.2 to 3.5. As expected, income elasticity is positive and less than one indicating a highly income inelastic demand for housing. Initially, a price term is not included in the analysis and this may possibly result in a downward bias in the income elasticity estimate.[10] This is verified when we look at the very low income coefficients given in Table 3.2. The addition of more variables, specifically the proxy variable for price, increases the elasticity of income estimate from 0.02 to 0.14 (Table 3.2).

This result proves to be consistent with estimates obtained in South Korea, although the values for the Philippines are slightly lower.[11]

The elasticity estimate using family consumption expenditure is smaller than those obtained using current measured income although they remain positive and highly significant. This result runs counter to the general theoretical expectation that estimates of income elasticity using proxies for permanent income are larger than those using

10. See Polinsky (1977).

11. The results for South Korea using current disposable income reveal an income elasticity of about 0.18 – 0.16 (Follain *et al.*, 1980).

TABLE 3.2

Dependent Variable *ln R*

Independent Variable	*All*	*Homeowners*	*Renters*
Constant	174.5944	212.7567	85.9365
ln FY	0.0222	0.0104	0.0381
	(4.80)	(1.87)	(6.57)
$\bar{R}^2$	0.0183	0.0029	0.0816
F value	23.0358	3.5275	43.2190
N	1344		

current income. In fact, studies in the U.S. and U.K. reveal that on the average, the permanent income elasticity estimates are 50% higher than the current income elasticity estimates (Polinsky, 1977). This problem may be attributed to some measurement problems involving income and consumption expenditure. It is possible that the income

TABLE 3.3

Dependent Variable: *ln* R

Independent Variables	*Selection*	
	1	*2*
Constant	3.2283	4.0618
ln FY	0.1401	–
	(6.83)	
ln FC	–	0.0271
		(3.71)
ln A	0.2801	0.2793
	(5.43)	(5.32)
MS	–0.0832	–0.0756
	(–2.22)	(–1.99)
S	–0.9880	–0.3579
	(–0.49)	(–0.18)
$\bar{R}^2$	0.0623	0.0365
F value	16.7397	9.9600
N	1344	

Note: t-values in parenthesis underneath the regression coefficients.

figures given in the completed questionnaire are understated and since consumption expenditure is derived as a residual using the monthly family savings, then the variable may not reflect the true consumption expenditure level. The use of this understated variable may have caused a downward bias in the consumption expenditure elasticity estimate. It is, however, not possible to verify this on account of the nature of the survey which depended on mailed answers.

Empirical studies, especially those done in the United States suggest that the income elasticity for homeowners is higher than those for renters (Reid, 1962; Lee, 1968; de Leeuw, 1971). In fact, in a survey of demand for housing studies in the United States, de Leeuw (1971) suggests that the true income elasticity lies between about 0.6 to 0.9 for renters and between about 0.7 and 1.7 for owners. This result is further confirmed by the results obtained in the analysis done by the type of occupancy, i.e., renters and homeowners, given in Table 3.4. The current income elasticity for homeowners is 0.26 as against 0.07 for renters. A similar observation is made for the consumption expenditure elasticity estimates.

TABLE 3.4

Independent Variables	*Homeowners*		*Renters*	
	1	*2*	*1*	*2*
Constant	3.0278	4.5822	4.3918	4.8140
ln FY	0.2634	–	0.0737	–
	(8.09)		(3.67)	
ln FC	–	0.0529	–	0.0184
		(4.33)		(2.63)
ln A	–0.0197	–0.0092	0.1035	0.0992
	(–0.23)	(–0.10)	(1.99)	(1.89)
MS	–0.0636	–0.0895	–0.0014	–0.0062
	(–1.13)	(–1.52)	(–0.04)	(–0.16)
S	–0.7956	–0.9124	–0.34838	–0.0456
	(–0.53)	(–0.26)	(–0.18)	(–2.02)
$\bar{R}^2$	0.1674	0.0880	0.0179	0.0104
F value	20.1063	10.1631	4.1514	2.8240
N	868		476	

Note: t-values in parentheses underneath the regression coefficients.

Using more direct measures of price allow us to get estimates of the price elasticity of demand for both homeowners and renters. However, while the estimate is negative and significant for renters, the same is not true in the case of homeowners. The coefficient is not significant, although it has the correct sign. It seems that demand for housing in this particular market is also price inelastic. The conclusion of the price term did not change the income elasticity estimate except in the case of homeowners where it slightly improved to 0.28.

The other variables included in the demand equation seem to behave according to expectations. Age has a positive and significant influence on housing consumption while the shortage variable exerts a negative effect. If this variable approximates the relative prices of housing in the market, then the coefficients display the correct sign. The coefficient of the marital status variable seems to render an inconclusive influence on the demand. Perhaps a more direct measure of household size should be used, when possible.

TABLE 3.5

Dependent variable *ln* R

Independent variables	*Homeowners*	*Renters*
Constant	3.550	3.0024
lu FY	0.2816 (8.57)	0.0735 (3.67)
lu P	–0.0600 (–0.51)	–0.2010 (–1.64)
lu A	–0.1017 (–1.17)	0.1079 (0.05)
MS	–0.0843 (–1.49)	–0.0030 (–0.07)
$\bar{R}^2$	0.1354	0.0207
F value	19.6027	5.5902
N	868	476

CHAPTER 4

GOVERNMENT INTERVENTION IN HOUSING: A BACKGROUND

Introduction

The dominant role of government in financing, providing and legally controlling housing is a phenomenon observable today in both developed and developing economies. Almost always, governments try to justify these incursions because of inherent imperfections in the market. Housing as an economic good is said to possess certain characteristics which give rise to problems of optimal allocation. Difficulties in the separation of consumption and investment elements and the substantial costs involved in housing may result in distributional problems to such an extent that the market mechanism fails and government intervention becomes necessary.

A historical sketch of housing policies in more developed nations reveals that public intervention dates back even before World War I. Such intervention, however, was limited only to regulatory measures to assure minimum standards of safety and health such as building and occupancy codes.[12]

Improvement of housing conditions was left to the market or to the employers (in the case of labor formally employed in private enterprises) whose efforts were considered very erratic, hence, without significant impact. This limited role of the government in housing was a result of the general economic ideology espousing that optimal resource allocation is achieved from the untramelled interplay of economic market forces, which especially became popular after the industrial revolution. This idea though comes into conflict with social forces compelling government action in housing, especially the poor housing condition of urban workers. Such conflict and the resulting government actions demonstrated that the profit motive in the housing market had failed to produce the beneficial results expected to flow from unfettered competition.

12. See Burns and Grebler (1977) for a more detailed discussion.

In the years that followed, government intervention had broadened in scope to include measures especially designed to aid the housing sector and to expand or/and upgrade the supply of dwellings to the poor. Thus, we observe a range of alternative policies introduced in different countries at different points in time: mortgage loans being provided or guaranteed by governments, state institutions being established to finance investments shunned by private capital due to the high risks involved, subsidies assisting slum clearance or rehabilitation and rehousing allowances being paid to families who cannot afford to pay market rents.

The approach towards the housing problem taken by each country and over time varied. For example, while the United States tried to maintain a very active private sector in its housing programs, most countries in Europe maintained the share of government financing and public enterprise in total residential construction at a high level especially during the 1920s. In fact the Central governments provided the bulk of funds for loans which were given at submarket rates of interest or for subsidies or both. The policy orientation of the United States towards private enterprise was clearly manifested in the preamble of the Housing Act of 1949 which emphasizes "the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family", and that, "private enterprise should be encouraged to serve as large a part of the total need as it can" with government assistance to be "utilized where feasible to enable private enterprise to serve more of the total need."[13] In contrast, the British Housing Act of 1949 stipulated that "the Government's first objective is to afford a separate dwelling for every family which desires to have one".[14]

This contrast in policy orientation is highlighted here because this gives us a spectrum of policies potentially applicable in developing economies. At one extreme we observe an emphasis on house construction as a strategic economic activity which can prime the economy during periods of economic slowdown especially because of its "multiplier" effects. At the other extreme we have a more exclusive concern with direct intervention to improve the housing con-

13. Taken from Burns and Grebler (1977) which quoted from the US Housing Act of 1949, C. 330; 63 State. 413. p. 80.

14. *Ibid,* p. 80, as taken from A.L. Schorr, Slums and Social Security, Washington DC: Department of Health, Education and Welfare, Social Security Administration, Research Report No. 1, (1963) p. 177.

dition of people who are believed to be disadvantaged by the market mechanism.

The 1940s saw the start of substantial public intervention in housing among the developing countries. Although observed to have been patterned after the housing policies in Europe and the United States these housing policies can be classified under two major categories.[15]

One policy is the adoption of programs developed in the advanced nations but adjusted to suit local conditions. For example, governments are improving the financial structure supporting the housing sector believing this to be the key to an efficient and successful housing program. This is done by creating and strengthening public and private mortgage lending financial institutions, introducing government guarantees on mortgage loans and establishing savings and loan associations. In some countries, social housing programs are pursued which are wholly or partially funded by the national government. Still in some, development banks and social security institutions become substantial financiers and sometimes owner-developers of projects.

The other type of policy seems to be more realistically suited to the economic and fiscal capacity of developing economies. This orientation emanates from the realization that European and other foreign models, for government funded and subsidized housing pose severe constraints especially in terms of the limited resources available in low-income countries. Very few people also benefit from the adopted models. Massive importation of building materials required by such models results in a negative effect on the balance of payments position of the country. Thus, a set of policies was adopted that would allow a larger portion of the population to benefit from the housing program. This policy orientation was clearly evident in the 1960s and one of the most commonly adopted approaches was the "sites and services" approach. Under this scheme the government provides the land, takes care of the layout of the site, secures land tenure for the occupants and installs/provides facilities for water supply and waste disposal and other basic community needs. The building of the housing units is left to the residents. Variants of this gradual approach are many and government support is substantial in almost all these schemes.

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15. *Ibid*, p. 88.

Most housing policies even among advanced nations owe their origins to some form of emergencies in the past like wars or economic depressions or inflations calling for rent control. Although initially aimed to provide short-term effects, these policies have become embedded in the structure. Subsequent policies then were somehow grafted on to the existing ones in response to new problems or failure of the existing programs to solve old problems, or still, failure to accommodate certain groups in its implementation.

Theoretical Arguments for Intervention

Why has housing received the kind and amount of government intervention it did in the past among the developed economies and at present even among the developing countries?

At the theoretical level, several authors come up with a number of circumstances which warrant government intervention. Burns and Grebler (1977) cite four (4) major criteria for public intervention in the provision of a good or service. The question then becomes whether housing qualifies under any of these four standards:

1. *Merit Goods.* If the good or service is obviously in the public interest or extremely expensive but whose costs are impossible to allocate to specific beneficiaries then it is generally provided by the government. The list of merit goods varies among countries but housing (especially for low-income groups) is more or less seen as a merit good or akin to merit good by countries like United Kingdom, Canada and the Netherlands.[16]

2. *Goods Distributed Unequally.* When goods and services are distributed in a way contrary to set social objectives, government intervention is always looked upon as a corrective mechanism.

Housing is considered as one of the means which can be used by the government in reallocating wealth in order to distribute consumption more equitably.

3. *Large Projects and Economies of Scale.* Under this criterion, public intervention in housing may be justified for two important activities, namely, land assembly for large-scale, comprehensive redevelopment programs and experiments involving building techno-

16. This is based on the share of total residential construction directly supported by the national treasury of each country.

logy and other types of housing projects considered risky which normally may not attract private (sector) investment.

4. *Market Imperfections.* This involves the organization and structure of the housing and mortgage markets which almost always deny the poor of access to financing.

Stafford (1977) likewise enumerates more specific circumstances under which government intervention in housing may take place. These include natural monopoly, the existence of externalities, consumer rationality, uncertainty, income distribution and imperfect capital markets.

The first case is easily used in the provision of education and health services but proves difficult in the case of housing, especially in the Philippines where the desire for homeownership among households is overwhelmingly strong. The existence of externalities which may come in the form of blight and decay (as a result of underconsumption of housing services) is a very popular argument for intervention especially in the United States. Grigsby (1963) argues that "the private market works only to erect, alter and discard assets and seems incapable of providing replacement houses on the same site and in no way foster renewal". The normative judgement that the individual is the best judge of his own welfare and the assumption that individual preferences are revealed by choices are challenged by arguments put forward that individuals are unable to make the right decisions if left to themselves. Hence, the government should intervene to ensure that individuals consume a different and better quality and quantity package of housing services than they would consume otherwise if left to themselves. Another argument for government intervention is the fact that individuals may not be able to make the right decisions on account of inadequate or imperfect knowledge about the market. Finally, income inequalities and the organization of housing and mortgage markets may prevent poor families from obtaining the "standard" housing package. The poor inevitably find themselves in trouble paying the rent for a given rented unit or securing finance for house purchase.

Wheaton (1981) also discusses some of the underlying arguments advanced in favor of government intervention in housing through policies of regulation and control, and subsidies in Egypt. The first of these arguments rests on the issue of income redistribution. It is held that direct income redistribution is administratively difficult especially in developing economies, so a country's social equity goals

are best achieved through a subsidy program involving commodities or services whose consumption is income inelastic.

The second argument suggests that temporary controls on housing prices are necessary when changes in prices are due to short-run bottlenecks. This is based on the belief that price increases only create windfall gains and will not necessarily result in higher supply since supply is fairly inelastic in the short run. The soundness of this argument depends of course on whether the price changes are really just temporary in nature; they may be caused by structural factors which may make them more permanent instead.

The final argument is perhaps the most popular and it suggests that there are social benefits from housing beyond those accruing to the occupants, that housing should be consumed and produced at levels greater than what is ordinarily supplied by the private market. The hypotheses which emerged suggest that improved housing:

1) improves labor productivity through better motivation and health;
2) improves health conditions; and
3) improves the public visual or aesthetic environment.

A review of some of the studies undertaken to test the first two of these hypotheses reveals that there is no conclusive evidence showing that these social benefits do indeed result from better housing.

Different countries have implemented different policy thrusts over time and there seems to be no convincing evidence that one type of orientation is superior over the others. The only clear message is that government intervention is justified not only on the grounds that it can prove that the market breaks down in the provision of housing, but that it can do better and really does better than the market.

Past experiences of developed economies reveal that although they have separately pursued housing strategies through different sets of policy instruments, these strategies have in many ways remained similar to one another in the context of what they want to achieve. Specifically, they have been constructed along four major elements which are not really mutually exclusive:

1. The encouragement of owner-occupation;
2. The provision of public owned rented accommodation allocated by "need";
3. The protection of private tenants through rent control and security of tenure legislation;

4. The improvement of housing stocks through
   (a) conservation and renovation
   (b) urban renewal
   (c) filtering[17]
   (d) income supplement.

Experiences of Selected Countries

It is very common to find program strategies adopted in developing countries which are very similar, if not entire replications, of strategies earlier introduced in the more developed economies. Housing policies have not been spared of this "tradition". It is instructive, therefore, to review the experiences of selected countries in terms of their housing programs.

Starting off with the more developed economies, the United States, United Kingdom and Sweden stand out specifically because they represent three different major approaches to the housing problem. In more general terms, Sweden adopted a socialist market in housing where there is very little role for private capital and where government intervention was regarded not merely as a temporary necessity but a more permanent involvement which was both politically and economically advantageous. The British policy on the other hand went through different stages on account of relatively rapid changes in the leadership (i.e., alternation in the Office of Conservative and Labour Governments). Basically, though, a welfare approach to housing was taken by the government. Local authorities were encouraged to build council houses for the working-class people and rent subsidies to tenants were abundant. Rent control was also introduced and remained in effect for some time. Finally, the United States housing policy in a sense "is to have no policy and rely on private enterprise," (Heacley, 1978, p. 175). Private enterprise, however, has been stimulated by increased demand for owner-occupied housing resulting from tax concessions and mortgage guarantees which the federal government makes available to home-owners. Unlike Sweden and the United Kingdom, the lower income groups in the United States are said to have received less attention with Congress introducing more or less uncoordinated and

17. Filtering in the literature is defined in terms of changes in the real values of an existing unit of housing stock. According to Lowry (1960), a dwelling unit has filtered if, and only if, the quality of housing stock contained in the unit has changed. Hence, a dwelling unit has filtered up (down) if, and only if, the quantity of housing stock (or housing services yielded per time period) contained in this unit has increased (decreased).

diverse programs (e.g. public housing and subsidized rental and mortgage interest programs), largely favoring the middle income group.

In the Latin American countries, specifically Mexico and Brazil, governments also concentrated their efforts on the provision of adequate housing services to the poor. In Mexico, for example, a National Housing Fund was established in 1972 which in essence took over the responsibility of providing housing to the working class from private establishments (firms with 100 employees or more were required by law to provide housing facilities to its workers).

All enterprises were obliged to give bi-monthly contribution to the Fund equivalent to 5% of the base salary of each worker. This, plus the addition of considerable money from the government has created the financial capability to construct low-cost housing in volume (i.e., 70,000 units during the first 3 years) to be distributed to the workers on the basis of a lottery system which discriminates less against employees of small enterprises or those who change their place of work. The government also fixed certain minimum standards of construction and urban development in areas where the Fund operates on a large scale. The recipients pay the NHF monthly installments which may be spread over twenty years at an interest rate of not more than 4%. But similar to what happened in the developed economies before, the program reached only a few of the target population. De Alcantara (1977) observes that while the program provided institutional assistance in obtaining private dwellings for the lower income groups, they were still seen as a privileged group since the cost of housing was roughly fifteen times more than the cost of rural housing.

Similarly in Brazil, the National Housing Bank was created in 1964 to promote overall development through the direct and indirect effects of housing projects upon the housing-related industries, and to encourage family savings. Resources from the Funds de Garantia por Tempo de Servico (an all-inclusive social security fund) were used for this purpose but not really as a means to provide low-cost housing (Singer, P. and B. Lamounier, 1977).

CHAPTER 5

PUBLIC POLICY AND THE PHILIPPINE HOUSING MARKET

> The brutal fact of the matter is that for all this weight of law and money, no government in my view has ever had a consistent housing policy, and we still in 1975 have serious, indeed often desperate, residual housing problems – particularly for the worst off in our Society. We have overcrowding. We have homelessness. We have families living in squalid conditions. We have a system of subsidies which distribute aid to housing in a whimsical manner and we have lurches in total investment in housing which amongst other things, have seriously damaged the efficiency of our building industry Crosland, 1975).[18]

These statements describe the state of government intervention in the housing market in the United Kingdom. The problem that these statements present is all too familiar in a developing country like the Philippines. As early as the decade of the 30s, several legislations had been passed creating new bodies or replacing old ones to take care of the housing problem. Different thrusts emanated and since most of these agencies were short-lived, the impact of the programs introduced were mostly superficial.

Government intervention in the Philippine housing market today is so pervasive not only in terms of the number of agencies created but more importantly in terms of expenditure that some sectors of society have started to question whether such an active and direct role is indeed necessary and beneficial considering the country's current economic problems. More detailed questions like who really benefit from public expenditures for housing or whether the government should subsidize new construction and rehabilitation are also posed. While political considerations will always influence answers to these policy questions, a more systematic evaluation of some of the

18. Taken from Stafford (1978). These were the words of the late Mr. Anthony Crosland, the Secretary of State for Environment at the United Kingdom, when he indicted postwar governments for the preponderance of piecemeal legislations and the lack of a sustained and cohesive policy in spite of the enormous increases in public investment on housing.

existing programs and their alternatives should provide a better perspective for policymakers thereby reducing their dependence on plain undocumented rhetoric when drawing up housing programs. This part of the study hopes to accomplish this end.

A Brief Historical Background[19]

Prewar housing conditions must have already warranted some form of government intervention. As early as the American regime, some efforts to develop a housing policy were evident although these were concentrated in Manila on account of its overcrowding and sanitation problems. Hence, the initial steps taken under the American regime were in the form of a sanitation drive. This was carried out by setting new sanitation and building standards that were adopted to native dwelling construction and establishment of "sanitary barrios" which served as relocation areas for families whose nipa houses originally located in congested areas were demolished. These barrios were located within city boundaries and were supplied with basic facilities not available in the nipa neighborhoods, (e.g., surface drainage, streets and alleys, fire hydrants, public bath and public laundry). Relocation was made at public expense but the relocated families had to pay some amount for rent to the landowners (Ocampo, 1976).

After about two years of implementation, funds for this project dwindled and sites became more difficult to acquire. This was also accompanied by a change in the housing program's thrust to sanitary models of single-family and apartment units. However, according to Ocampo (1976), "these model houses were built for demonstration purposes only since the government did not actually supply new houses in the sanitary barrios" (p. 3).

By the 1920s as a result of labor agitation, *barrios obreros* were established and this scheme was merely superimposed on the previous sanitary barrio scheme with some additional features like the renting out of some houses and lots.

Evidently, the government under the American regime carried out housing programs just as a matter of maintaining public health

19. This part of the study draws extensively from a study of housing conducted by NEDA in 1981, particularly the article on Trends in Housing Delivery by Sonya Ligot. A similar discussion also appeared in a series of articles written by Commissioner Ernesto C. Mendiola, Chief Executive Officer of the Human Settlements Regulatory Commission which appeared in *Bulletin Today (1983)*. The articles of Ocampo (1976, 1978) also provided the baseline information especially during the prewar and early postwar periods.

and safety and avoiding the proliferation of breeding grounds for crime and sedition. Hence, the programs basically involved slum clearance and some relocation. With the influence of the private sector, however, the evolving housing policy of the regime was "something less than pure altruism for the poor" (Ocampo 1976, p. 8). For example, the Housing Committee recommended the construction of dwellings for slum families who could afford them and this was in spite of the fact that during the period (circa early 1930s) about 60%of the slum families could not afford 'any kind of suitable home,' and 40% of slum-dwellers in Manila "live in extreme poverty and squalor, in many instances on the verge of starvation," (Ocampo, 1976 as quoted from another source, p. 8).

During the Commonwealth period, a program of social justice emerged and while the period's housing policy tried to respond to the needs of the labor group, it remained in part just an extension of the previous period's program. Hence, the slums were still seen as the source of crime and diseases as well as the breeding place of rebels. Officials of the Commonwealth government also felt that slums were an eyesore and there were efforts to make the city presentable to the eyes of the foreigners.

More direct government intervention evidently started in the 1930s. In 1938, the laborer's tenement project was completed in Barrio Vitas, Tondo. Eleven two-storey buildings were constructed and these provided 262 dwelling units with modern toilets, water supply and electrical installations. Rents were low (i.e., rates ranged between ₱4.70 and ₱12.70 per month) and the required monthly income was between ₱30 and ₱100. However, the project's name was somewhat a misnomer since a good proportion of the tenants (i.e., 37%) were classified as employees (and not laborers). This resulted because applicants without stable job were not considered.

This project was followed by a series of broader legislations and the creation of housing agencies to directly implement housing programs. On July 11, 1936, Commonwealth Act. No. 620 or the Homesite Act was passed which authorized the government to acquire lay as well as friar states which were eventually subdivided into home lots or small farms. One major acquisition made in 1938 was the Diliman site which was intended to be a "social experiment" to be replicated in all parts of the country where there are laborers.[20]

20. Apparently, this was an ambitious project as evidenced in the words of President Manuel L. Quezon as quoted by Ocampo (1976), p. 17.

"It will not be long now when the shore which we now see will be filled and

The people's Homesite Corporation was created to develop this area.[21] Its charter, however, evidently did not reflect the bias towards the working-class ascribed to the Diliman project at the start of its implementation, and although it was aimed at general welfare, it actually reflected an orientation towards the middle class.

In early 1941, a shift towards a more social orientation in the government's housing program was observed. Policy was geared towards social responsibility which required state intervention and assistance in behalf of the poor particularly the wage earners residing in the slums. The National Housing Commission was created by virtue of Commonwealth Act 648 to undertake programs in urban housing, subdivision and slum clearance programs. Its objectives were basically urban-oriented but while they emphasized the elimination of slums, they also considered replacement of slum dwellings. Also instead of being "middle class", these objectives were aimed broadly at the needy and the very poor. The organization of the NHC was not carried out immediately on account of the war.

Early postwar housing programs retained the previous period's thrust: slum clearance, subdivision development and relocation activities as authorized under the PHC and the NHC charters.

In 1947, the People's Homesite and Housing Corporation (PHHC) was created through Executive Order No. 93. This new agency was the result of the merging of the People's Homesite Corporation and the National Housing Commission and it had the following corporate objectives:

(1) establishment of public housing for low-income families;
(2) slum clearance;
(3) establishment of housing for destitutes; and
(4) acquisition, subdivision and resale of landed estates.

Again the agency's program focused on housing and subdivision development catering basically to the needs of the middle-income groups. Its slum clearance and relocation functions were carried out only in collaboration with other agencies of government, specifically those involved in social welfare services delivery.

become dry land where laborer's houses can be built . . . Likewise, the Government will construct a townsite adjacent to the city, sufficient to accommodate 21,000 families, enabling them to build houses on 200-square meter lots. This new townsite will have a hospital, a beautiful and clean market, wide roads, . . . a nursery where nurses will take care of babies while their mothers work in factories and industrial houses, playgrounds, . . . a big park . . . Laborers, who now live in crowded places located in low and muddy regions in the city will have the comforts which they do not enjoy at present."

21. For a detailed description of the work done by the PHC, see Ocampo (1976), p. 18.

PHHC was envisioned to operate more like a private enterprise guided by a set of objectives to arrive at, as a result of combining PHHC and NHC's objectives. PHHC's performance until the 1960s cannot be presented here in detail but a discussion of its specific projects can be obtained from Ocampo (1978).

Like any government corporation during the period, financial as well as institutional problems plagued PHHC's operations. Conceptually, it was there to "operate not for profit but for service." However, it was also expected to be self-sustaining. In one of its reports, PHHC clearly presented the issue:

> In its true concept, public housing should serve families who cannot afford decent dwellings, and therefore should charge lower rents than private housing. Most countries accomplish this by subsidizing public housing. Unfortunately, however, public housing in the Philippines . . . is financed and treated like private housing and consequently must operate like one. (Ocampo, 1978, p. 12 as quoted from PHHC, Annual Report, 1958-1959, p. 11).

Critics of the operations of PHHC were numerous. The program area hard hit was its land acquisition program which, according to some critics, entailed very exorbitant costs. This resulted in resale prices which were considered too high for employees to pay. Also, because of its dual function as a producer of housing for low income families and as a private enterprise, PHHC encountered a high inventory of land which it could not develop anymore.

The succeeding decade saw new problems emerging as a result of the increasing need to house more people and the corresponding lack of mortgage funds. Thus the Home Financing Commission was created through Republic Act 580 on September 15, 1950 and its main thrust was the mortgage insurance program.[22] This program encouraged banks and financial institutions to grant housing loans on easy terms of payment. It also helped in the mobilization of investible funds of financing entities for housing purposes through the reduction of risks on loans with longer periods of maturity. In1978, this Commission took on another name, Home Financing Corporation, and operated under the umbrella of the Ministry of Human Settlements.

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22. This function has been assigned by law to PHHC in 1948, but this agency never performed it. The HFC which was created with the help of foreign advisers (mostly Americans), was patterned after the US Federal Housing administration and commenced its operations only in 1956.

It was also during this decade that the social security agency for government employees or the Government Service Insurance System (GSIS) started to extend inter-agency project loans to finance PHHC projects.[23] By 1955, it started granting housing loans to its own members. Two years later, the Social Security System also began to extend housing loans to its members. The Development Bank of the Philippines also started a small-loans program for low income borrowers in 1960.[24] Similar to the housing programs launched earlier, a very small proportion of the low-income group availed of the loans from these institutions since the rules governing the program favored only the middle income groups and even the upper classes (Quiñones, 1974).

During the 1960s, the directions of the government's housing program were as follows:

1. expansion of housing finance scheme by geographical coverage;
2. tenement housing;
3. construction of pre-fabricated dwelling units; and
4. increasing resettlement and relocation programs cum industrial development.

The Tenement Law (R.A. 3469) was passed reviving the construction of multi-storey tenement houses which were rented out to low income families. It was also during this period that Congress passed R.A. 3802 mandating PHHC to sell all its rented housing units to the tenants at cost and payable within 10 years at 6% per annum interest and with all the previous rental payments applied to the purchase price. Likewise, several resettlement and relocation activities of squatters were undertaken. The National Housing Corporation was created with the primary function of manufacturing pre-fabricated dwelling units for low and middle income groups to help in the coordinated massive housing program of the government. The National Special Housing Act (R.A. 6026) was also passed to introduce a new approach to the resettlement program of the government through a balanced residential-industrial development program. Under this approach, resettled squatters were given necessary and appropriate means of livelihood so they would not abandon the resettlement areas.

The low income families remained the target group of government administered housing projects in the 1970s. Urban redevelop-

23. GSIS was created in 1936 by virtue of Commonwealth Act No. 186.
24. DBP was formerly the Philippine Rehabilitation Finance Corportion (RFC).

ment through the sites and services approach became the primary focus of the government, specifically the Tondo Foreshore and Dagat-dagatan Area. Government lending institutions provided substantial contribution through individual residential loans and participation in mass housing projects. This decade also witnessed the creation of a number of new government agencies to take care of the housing program of the government:

1. Task Force on Human Settlements (1973)
2. Inter-Agency Task Force on Nabaooan Relocation (1973)
3. Tondo Foreshore Development Authority (1974)
4. National Housing Authority (1975)
5. Human Settlements Regulatory Commission (1976)
6. National Home Mortgage Finance Corporation (1979)
7. Ministry of Human Settlements (1978)
8. Home Development Mutual Fund (1978)

It can be gleaned from the above discussion that the concept of housing in the Philippines had undergone remarkable changes over the years. Initially considered simply as a "public problem" involving slum dwellers and squatters (i.e., the low income groups), housing has evolved into a program considered in the context of a "human settlements approach" where the provision of shelter is complemented by the other dimensions of human settlements. Self-reliance is emphasized so the program really becomes a "partnership" between the government and the beneficiaries.

Until the last few years of the 1970s, the proliferation of government housing bodies evidently resulted in many duplications and confusion. There was little coordination among these agencies that a more cohesive and sustained housing program was never accomplished. Piecemeal legislations were abundant and each one was serving only a particular purpose and a particular group for a limited period of time. This resulted in very superficial and short-lived effects and on the whole a waste of scarce resources.

In an attempt to deliver more housing services to a greater number of people and to consolidate the efforts of the different housing agencies, the National Shelter Program was formulated in 1978 putting all housing agencies of the government under one Ministry responsibility. It was during this year that the Ministry of Human Settlements was established for this very purpose. Under this program, maximum participation of the private sector was encouraged.

The National Shelter Program

The National Shelter Program integrates the four basic components of a housing program, namely: regulation, production, finance and marketing. The rationalization, efficient operation and complementation of these basic components bring together seven agencies and corporations which operate under the umbrella of the Ministry of Human Settlements. These agencies include the following:

1. National Housing Authority (NHA)
2. The National Housing Corporation (NHC)
3. The Human Settlements Development Corporation (HSDC)
4. The Human Settlements Regulatory Commission (HSRC)
5. The Home Financing Corporation (HFC)
6. The National Home Mortgage Finance Corp. (NHMFC)
7. The Home Development Mutual Fund (HDMF)

Operating in the context of the four program components, the Ministry of Human Settlements, through one or a combination of the above-cited agencies, performs a big bundle of functions, to wit:

1. *Regulation.* Generally, this involves a continuous rationalization of building standards and regulations governing housing construction and subdivision development (i.e., implementation of PD 957 and Batas Pambansa Bldg. 220). Specifically, the function involves regulation of buying and selling activities that take place in the context of land development. Carried out specifically by the Human Settlements Regulatory Commission (HSRC), the objective is to protect prospective buyers of housing units from unscrupulous developers and sellers.

2. *Production.* The functions related to production are basically geared towards ensuring a continuous supply of housing construction inputs ranging from technical expertise to construction materials which use indigenous and inexpensive materials. These functions are:[25]

a. Standardization of housing components and actual pre-fabrication;

b. Stockpiling of critical material components through advanced volume purchases;

c. Accreditation and franchising of private developers, constructors, fabricators, and suppliers who shall directly participate in the actual construction of identified housing projects.

25. Multi-year Human Settlements Plan, 1983.

3. *Marketing.* The marketing function is being undertaken through the following programs:

a. "Buyer-builder-bank". This is a scheme where a developer is allowed to pre-market the house and lot packages while construction is still on-going. The buyer then invests definite amounts for his choice of house and lot and the bank serves as the depository of the buyer's investment.

b. Home matching. This is an on-line referral system which matches prospective home buyers against current inventory and maintains files of Pag-ibig members who intend to avail of housing loans at any future date.

4. *Finance.* Viewed by many as the most crucial component of the shelter program, the shelter finance system operates along two major schemes, namely: development financing and homebuyers or end-user financing. The operation of the system basically involves three major government housing bodies, namely: the Home Financing Corporation, the National Home Mortgage Finance Corporation and the Home Development Mutual Fund or Pag-IBIG.

A schematic diagram of how the National Shelter Program operates is given in Figure 5.1.

The National Shelter Program envisions to deliver 1,000,000 homes within a period of 10 years, or an equivalent of 100,000 units per year for 10 years. In Metro Manila alone, 200,000 houses are expected to be constructed during the period 1983-1987. The rest of the regions are expected to get the following allocations for the same period.[26]

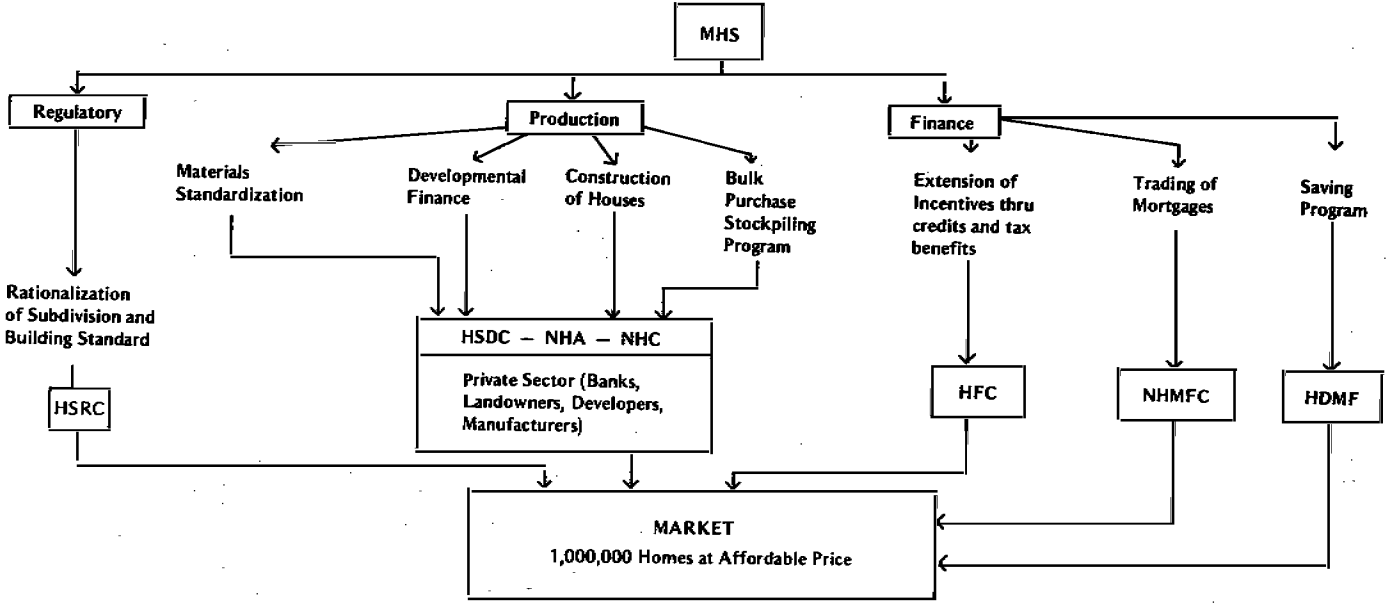
These housing targets of course require commitments for construction materials from the National Housing Corporation, and a total value of ₱21.78 billion worth of construction materials is estimated for the same five-year period.

In terms of end-user financing, the NHMFC places the finance requirement for the five-year period of ₱35 billion. Finally, an aggregate of about 5,200 hectares of land are expected to be developed to complete the program until 1987.

The success of this program hinges substantially on the cooperation of the private sector in all its components. Several schemes are being adopted by the MHS to involve the private sector especially in land development and actual house construction activities. Likewise,

26. *Ibid.,* p. 23.

FIGURE 5.1[a]



[a]Taken from the Multi-Year Human Settlements Plan, 1983, p. 21.

TABLE 5.1
REGIONAL DISTRIBUTION OF PROPOSED HOME CONSTRUCTION UNDER THE NSP, 1983-1987

		No. of Points
Region	I	23,615
	II	18,765
	III	40,165
	IV	46,370
	V	22,675
	VI	22,385
	VII	21,260
	VIII	16,520
	IX	17,500
	X	17,085
	XI	35,400
	XII	18,260
	TOTAL:	299,920

Source: Multi-Year Human Settlements Plan, 1983.

more private banks are being encouraged to participate in the home-buyer's financing schemes. It is therefore instructive to discuss in detail the shelter finance system since the availability of mortgage funds seems to be the major constraint in buying or building a house, especially among middle and low income families.

The Shelter Finance System

Two major components of the Shelter Finance System need more elaboration since they play very crucial roles in the delivery of housing units. These are the home-buyers' finance and the construction and development finance. On one side is the program to initiate more demand and on the other side is a program to induce a higher supply of housing units. Playing key roles in this system are the Home Development Mutual Fund (HDMF), the National Home Mortgage Finance Corporation (NHMFC) and the Home Financing Corporation (HFC).

Homebuyers' Finance

1. *Home Development Mutual Fund (HDMF)*

The HDMF, popularly known as Pag-IBIG[27] Fund is a provident/savings system for private and government employees and the self-employed. Membership in the Fund entitles one to avail of the Pag-IBIG housing loans.

All members contribute to the Fund an amount equivalent to 3% of their basic monthly salary which are equally counterparted by their employers.[28] The contributions are credited to the employees account which earns annual dividends of no less than 7.5%.[29] In the case of the self-employed and self-paying members,[30] the required contributions vary. Self-paying members contribute 6% of their Fund salary while the self-employed members contribute a fraction of their Fund salaries following a schedule prepared by Pag-IBIG. Unless a member takes out a housing loan, total contributions plus dividends will be returned to the member upon retirement, disability, permanent departure from the country, or after 20 years of membership or death whichever comes first.

The Pag-IBIG Fund entitles a member to borrow a housing loan equivalent to thirty-six (36) times his Fund salary, but not to exceed ₱100,000.00.[31] A couple and a third member of the family within the fourth degree of consanguinity and who are members of the Fund may join their loan capabilities for a combined loan not to exceed ₱300,000.00. The loans carry a 9% interest rate per annum and a maximum payment term of 25 years.

The Pag-IBIG loans are given to finance any of the following activities:

1. Construction of a house on a lot owned by the member;

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27. Pag-IBIG is an acronym for Pagtutulungan: Industriya, Bangko, Ikaw, at Gobyerno.

28. In 1982, the amount of contribution was set at 2% of the basic monthly salary of each member, again equally counterparted by the employer.

29. Variable dividends may also be declared depending on the earnings of the Fund. In 1981 and 1982, the Fund declared 2.5% additional dividends.

30. A person who is either an employee of a foreign embassy, military base, International organization or institution with offices in the Philippines,an employee recruited in the Philippines for employment abroad, or a non-permanent government employee not covered by GSIS may become a self-paying member.

31. Regular members may avail of the loan after at least 6 months of continuous contribution while self-paying and self-employed members will have to wait until after 12 months of continuous contribution or he may, after 6 months of continuous contribution, opt to advance the corresponding contributions for the next six months to hasten the availment of the loan. Members under the Book 1 Classification can already borrow a housing loan equivalent to 48 times their Fund salaries.

2. Construction of a house on a lot not yet owned or fully paid for by the member;
3. Acquisition of a house-and-lot package;
4. Acquisition of a lot;
5. Acquisition of a residential unit in a condominium, townhouse, rowhouse, cluster or duplex;
6. Acquisition of an apartment unit;[32]
7. Long-term lease of a BLISS unit;
8. Group Housing;
9. Home Improvement; and
10. Other special cases which the Board of Trustees may authorize.

A Pag-IBIG Fund member avails himself of a housing loan through an accredited private or government lending institution which processes and underwrites the loan based on established guidelines.[33]

As of the end of 1983, a total of 2.1 million members from 83,500 employers have been recorded. This membership base includes those from the private and public sectors.

Table 5.2 below gives the income profile of the Fund's members as of September 1982. It can be gleaned from the table that a big proportion of the members, i.e., 82.43%, have monthly incomes of ₱1,000 and lower. In fact, more than 50% of the total membership reported monthly income of ₱550.00 and less. These figures become even more significant if we consider the schedule of monthly amortization for specific amounts of loans which an individual member can borrow.

The term of a Pag-IBIG loan, scheduled against the monthly amortization due per ₱1,000.00 loan is as follows:

Repayment Period	Monthly Amortization
25 years	8.39 per ₱1,000 loan
20 years	9.99 per ₱1,000 loan

32. Introduced sometime in November, this program allows tenants to purchase the apartment units they are presently occupying through a loan, the amount of which is determined on the basis of the floor area of the unit. The standard used for the computation of the loan value is ₱1,500/sq.m. or ₱1,000/sq.m. and ₱500/sq.m. for improvement. The program was good only until June 1984.

33. As of the end of 1983, there were 96 accredited lending institutions, four (4) of which are government banks. The other institutions are classified as follows: private commercial banks – 18; private development banks – 24; Savings and loan associations – 36; building and loan association – 1; Insurance Companies – 3; Finance Companies – 1; Investment Houses – 2; and savings and mortgage banks – 7. Details are given in Annex A.

TABLE 5.2
MEMBERSHIP PROFILE BY INCOME LEVEL
(AS OF SEPTEMBER 1982)

Income Level	*Absolute Frequency*	*Percent*	*Cumulative Percent*
Lowest – 250	24,981	6.68	6.68
251 – 400	56,898	15.21	21.89
401 – 550	124,348	33.24	55.13
551 – 700	54,674	14.62	69.75
701 – 850	29,557	7.90	77.65
851 – 1,000	17,885	4.78	82.43
1,000 – 1,150	11,618	3.11	85.54
1,151 – 1,300	6,098	1.63	87.17
1,301 – 1,450	4,242	1.13	88.30
1,451 – 1,600	3,587	0.96	89.26
1,601 – 1,750	2,386	0.64	89.90
1,751 – 1,900	1,927	0.52	90.42
1,901 – 2,050	2,536	0.68	91.10
2,051 – 2,200	2,525	0.68	91.78
2,201 – 2,350	1,211	0.32	92.10
2,351 – 2,500	1,027	0.27	92.37
2,501 – 2,650	760	0.20	92.57
2,651 – 2,800	1,200	0.32	92.89
2,801 – 2,950	544	0.15	93.04
2,951 and above	7,646	2.04	95.08
missing	18,404	4.92	100.00
TOTAL	374,054		

Source: Home Development Mutual Fund.

15 years	10.14 per ₱1,000 loan
10 years	12.67 per ₱1,000 loan
5 years	20.76 per ₱1,000 loan

On a ₱50,000 loan for example, a borrower has to pay a monthly amortization of ₱419.50 for 25 years. Following the standard proportion of housing expense to total income of 25%, only families receiving a monthly income of ₱1,678 or higher can afford to bor-

row ₱50,000.[34] This means, further, that only about 10% of the total membership of the Fund can borrow ₱50,000 as of 1982. This result is even more disappointing considering that a ₱50,000 loan can hardly meet the current cost of acquiring a house and lot especially in Metro Manila today.

If we consider the proportion of total household expenditure which goes to housing as of 1979, this standard proportion of 25% is more than 50% of the actual figure which comes to only 10.13%. If we were to use this figure, which really makes sense since a very substantial portion of family income today is suspected to go to more basic needs like food, then the situation is even worse. For the same ₱50,000 mortgage loan, only families with a monthly income of about ₱4,141 and higher can afford to borrow. This means that as of 1983, about 98.22 of the members are out of the market. Using family income as the basis, only about 5.35% of the members are able to borrow.

A recent survey of 3,457 Pag-IBIG members conducted by the HDMF reveals that the average basic monthly income of the respondents as of the second quarter of 1983 was ₱1,054.68. However, 52.7% still earn between ₱500 and ₱1,000 a month, while 13.9% earn less than ₱500 (Table 5.3).

Compared with the 1982 profile, 66.58% is already an improvement since a high 82.43% of total membership were receiving ₱1,000 or less a month in 1982. Similarly, the average monthly basic income obtained in a similar survey conducted a year earlier was ₱703.62 a month which is lower than that obtained in 1983 and 80.7% of the respondents were still receiving below ₱1,000.

Considering family income instead makes the picture look better (Table 5.4). A small 18.05% of the total respondents had monthly incomes of ₱1,000 or lower. More than 50% (i.e., 53.72) of the respondents had incomes of ₱3,000 and lower. An average monthly income of ₱1,800.96 was obtained and this compares fairly well with the average of the previous year's survey which was only ₱1,028.00. Worth considering, however, is the fact that only about 17.68% of the total respondents reported family incomes which are higher than

34. Following the prescribed loanable amount equivalent to 48 times a member's fund salary, a member who earns ₱1,678 can actually borrow as much as ₱80,000. A graduated amortization plan has been introduced in early 1983 but its applicability is limited only to members employed by the Armed Forces of the Philippines (AFP), the Integrated National Police (INP), the National Police Commission (NAPOLCOM), the Ministry of Education, Culture and Sports (MECS) and its attached agencies, including state schools, colleges and universities.

TABLE 5.3
FREQUENCY DISTRIBUTION OF BASIC MONTHLY SALARY
(N = 3457)

Basic Monthly Salary	*Absolute Frequency*	*Percent*	*Cumulative Percent*
Less than 500	480	13.88	13.88
501 – 1,000	1,822	52.70	66.58
1,001 – 1,500	539	15.59	82.17
1,501 – 2,000	194	5.61	87.78
2,001 – 2,500	70	2.02	89.80
2,501 – 3,000	47	1.36	9.16
3,001 – 3,500	12	0.35	91.51
3,501 – 4,000	17	0.49	92.00
4,001 – 4,500	9	0.26	92.26
4,501 – 5,000	6	0.17	92.43
5,001 – 5,500	4	0.12	92.64
5,501 – 6,000	3	0.09	62.67
6,001 – 6,500	1	0.03	92.67
6,501 – 7,000	7	0.20	92.87
7,001 – 7,500	1	0.03	92.90
7,501 – 8,000	4	0.12	93.02
8,001 – 8,500	2	0.06	93.08
8,501 – 9,000	0	0.00	93.08
9,001 – 9,500	0	0.00	93.08
9,501 – 10,000	24	0.69	93.77
over 10,000	9	0.26	94.03
no response	206	5.96	100.00

Average basic monthly salary: ₱1,054.68
Source: Corporate Planning Department, HDMF *Pag-IBIG Membership Profile and Fund Awareness Survey,* 1983.

₱3,000. This profile still suggests that a good proportion of the membership of the Fund belongs to the low and middle income families, considering that a monthly income of ₱3,000 amounts to a per capita income of only about ₱535 using the average size of a household of 5.6[35] as of 1980.

35. Taken from the NEDA Statistical Yearbook, 1983.

TABLE 5.4
FREQUENCY DISTRIBUTION OF BASIC MONTHLY SALARY
(N = 3457)

Basic Monthly Salary	*Absolute Frequency*	*Percent*	*Cumulative Percent*
Less than 500	150	4.34	4.34
501 – 1,000	474	13.71	18.05
1,001 – 1,500	487	14.09	32.14
1,501 – 2,000	390	11.28	43.42
2,001 – 2,500	224	6.48	49.90
2,501 – 3,000	132	3.82	53.72
3,001 – 3,500	67	1.94	55.66
3,501 – 4,000	35	1.01	56.67
4,001 – 4,500	43	1.24	57.91
4,501 – 5,000	30	0.87	58.78
5,001 – 5,500	20	0.58	59.36
5,501 – 6,000	17	0.49	59.85
6,001 – 6,500	13	0.38	60.23
6,501 – 7,000	11	0.32	60.55
7,001 – 7,500	5	0.14	60.69
7,501 – 8,000	5	0.14	60.83
8,001 – 8,500	4	0.12	60.95
8,501 – 9,000	2	0.06	61.01
9,001 – 9,500	1	0.03	61.04
9,501 – 10,000	10	0.29	61.33
over 10,000	24	0.69	60.02
no response	1,313	37.98	100.00

Average monthly family income: ₱1,800.96
Source: HDMF, 1983

2. *The National Home Mortgage Finance Corporation (NHMFC)*

The NHMFC is a government non-bank financial institution created in December 1977 with an authorized capital stock of ₱500 million fully subscribed by the government to increase the availability of housing loans to homebuyers through the operation of an active secondary market for home mortgages. It provides a system which can prime the flow of massive mortgage credits at lower interest rates and longer repayment periods tap new fund sources; and increase private sector participation in home financing.

NHMFC provides a liquidity mechanism for financial institutions which extend housing loans under the Pag-IBIG, open housing and home improvement loan plans and a combination of Pag-IBIG and open housing or Pag-IBIG, open housing and pari-passu.[36] This is achieved through the continuous purchase of mortgages originated by these institutions on cash basis. This process relieves the lending institutions of the risks involved in long-term financing and assures faster turn-over of loan funds thus allowing them to accommodate more borrowers.

Funds used to purchase the originated mortgages are generated by NHMFC through the issuance of Bahayan Mortgage Participation Certificates (BMPC), a risk-free government security for housing which are fully and unconditionally guaranteed by the government. These BMPCs are backed by the pool of mortgages purchased by NHMFC and held in trust by DBP and a Liquidity Fund which can also be availed of by the investors through DBP (the trustee bank). All home mortgages purchased are insured by the Home Financing Corporation.

Consistent with its mandated objectives, the NHMFC has in 1980 officially "broken through the initial barriers of market wariness for its newfangled device" (NHMFC Annual Report, 1982). The first batch of mortgages purchased amounted to ₱191.39 million in 1980 and this was able to finance the purchase of 973 units benefitting 991 Pag-IBIG members (Table 5.5). Only seven originating financial institutions participated in this activity then. For the same period, the NHMFC sold ₱152.82 million worth of Bahayan Mortgage Participation Certificates to nine institutional investors. The succeeding years until 1983 witnessed further increases in the amount and number of mortgages purchased. By 1983, total outstanding loan amount made available reached ₱2.096 billion, serving about 20,623 beneficiaries and financing the purchase of 13,169 units. A remarkable performance is observed in 1983, as mortgages purchased this year accounted for 55.3% of the total with 96 originating financial institutions participating. On the average, mortgages purchased by the Corporation increased at an annual rate of 124.1%. Similar growth pattern was also observed in the sale of BMPC, which as of yearend 1982 amounted to ₱898.18 million. This marked an increase of more than 300% over the previous year's total.

36. A pari-passu loan is either a Pag-IBIG or open-housing loan combined with a regular loan extended to the same borrower by the same lending institutions and secured by the same collateral on a pro-rata basis with a portion of the mortgage purchased by NHMFC.

TABLE 5.5
SUMMARY OF MORTGAGE PURCHASES BY TYPE OF LOAN, 1980-1983

	Amount	*Number of Beneficiaries*	*Number of Units*
1980[a]			
Pag-IBIG	12,525,363	162	144
Open-Housing	16,364,200	138	138
Pag-IBIG sa BLISS	14,351,971	163	163
Existing Mortgages	148,144,731	528	528
TOTAL	191,386,265	991	963
1981			
Pag-IBIG	61,741,305	797	629
Open-Housing	25,465,600	265	219
Pag-IBIG sa BLISS	34,001,143	480	480
Existing Mortgages	27,976,319	126	126
TOTAL	149,184,367	1,668	1,454
1982			
Pag-IBIG	418,289,012	6,020	3,711
Open-Housing	103,021,192	1,016	794
Pag-IBIG sa BLISS	75,873,105	869	669
Existing Mortgages	—	—	—
TOTAL	597,183,309	7,905	5,174
1983[b]			
Pag-IBIG	931,430,979	8,625	4,887
Open-Housing	202,545,491	1,304	551
Pag-IBIG sa BLISS	24,560,422	130	130
Existing Mortgages	—	—	—
TOTAL	1,158,536,892	10,059	5,568
GRAND TOTAL	2,096,290,833	20,059	13,169

[a]Figures are for March-December period only.
[b]Figures are for January-September only.
Source: NHMFC.

By the type of loan taken, a high 80.4% of total outstanding loans in 1983 were Pag-IBIG loans (Table 5.6). This marked a big jump from a small share of 6.5% in 1980. Open housing loans

TABLE 5.6
PERCENTAGE DISTRIBUTION OF PURCHASES BY TYPE OF LOAN

	1980	*1981*	*1982*	*1983*
Pag-IBIG	6.5	41.4	70.0	80.4
Open Housing	8.6	17.1	17.3	17.5
Pag-IBIG sa BLISS	7.5	22.8	12.7	2.1
Existing Mortgages	77.4	18.7	–	–
TOTAL	100.0	100.0	100.0	100.0

also increased from 8.6% to 17.5% during the same period, while loans for the purchase of BLISS units declined especially after 1981.

The remarkable increase in the home mortgage loans made available to home borrowers is a milestone in the housing sector. Previously avoided by private financial institutions, the origination of housing loans by these same institutions is said to be a reflection of an emerging sense of involvement of the private sector in the development efforts of the government. A system of partnership in providing assistance for housing to the low and middle income families has finally evolved. However, the total figures may possibly overstate the achievement of the housing program insofar as getting a more active involvement from the private sector is concerned. We do observe an increasing number of private financial institutions getting accredited as originating institutions. What these figures do not give us is an indication that these private institutions do really provide the bulk of the housing loans.

Table 5.7 summarizes the extent of participation of the different accredited originating financial institutions. It is obvious that a bulk of the loans purchased by the NHMFC amounting to ₱1.032 billion was actually originated by only two government banks and these are the Philippine National Bank (PNB) and the Development Bank of the Philippines (DBP). As a proportion of the total purchase, this amount constitutes 51.64% (Table 5.8). Savings and mortgage banks originated a total of ₱374.6 million, averaging about ₱62.4 million each, since only six of the seven accredited banks were involved. Private development banks and savings and loan associations originated about the same amount. On the average, however, a participating private development bank lent ₱22.9 million while a savings and loan association lent only ₱9.5 million.

TABLE 5.7
CUMULATIVE SUMMARY OF MORTGAGE PURCHASES BY ORIGINATING FINANCIAL INSTITUTIONS (AS OF SEPTEMBER 18, 1983) (IN THOUSAND PESOS)

Originating Financial Institution	*Amount*	*Number*	*Number of Beneficiaries*	*Number of Units*
Government Banks	1,032,486.87	2	14,085	9,142
Commercial Banks	88,102.00	9	990	666
Private Development Banks	229,166.23	16	3,312	1,709
Savings and Mortgage Banks	374,594.71	6	3,746	2,281
Savings and Loans Associations	228,324.31	24	3,107	1,844
Building and Loans Associations	16,415.00	1	219	141
Insurance Companies	30,461.96	2	634	379
Savings and Thrift Banks	—	—	—	—
Investment Houses	—	—	—	—
TOTAL	1,999,551.08	60	26,093	16,162

Source: NHMFC.

TABLE 5.8
PERCENTAGE DISTRIBUTION OF MORTGAGE PURCHASES BY ORIGINATING FINANCIAL INSTITUTION

Government Banks	51.64%
Private Banks	
o Commercial Banks	4.41%
o Private Development Banks	11.46%
o Savings and Mortgage Banks	18.73%
o Savings and Thrift Banks	—
Savings and Loans Associations	11.42%
Building and Loans Associatons	0.82%
Insurance Companies	1.52%
Investment Houses	—
TOTAL	100.00%

Source: NHMFC.

In terms of beneficiaries, government banks served most of the homebuyers numbering about 14,085. Hence, average loan originated by these two banks amounted to about ₱73,304 (Table 5.9). Other originating financial institutions like the savings and mortgage banks and private commercial banks appear to have lent higher amounts on the average. Insurance companies registered the lowest loan value per borrower. Some care must be taken in interpreting these figures since a wide range of loan values is possible on account of the tacking-in system which allows a group of three borrowers to get a maximum loan of ₱300,000. Further, these loan values already include the open-housing loans.

TABLE 5.9
AVERAGE LOAN PER BORROWER
ORIGINATED BY ORIGINATING FINANCIAL INSTITUTIONS
(AS OF SEPTEMBER 18, 1983)

Originating Financial Institution	*Average Loan (₱/borrower)*
Government Banks	73,304
Commercial Banks	88,992
Private Development Banks	69,193
Savings and Mortgage Banks	99,998
Savings and Loans Associations	73,487
Building and Loans Associations	74,954
Insurance Companies	48,047
Savings and Thrift Banks	–
Investment Houses	–
TOTAL	76,632

Source: NHMFC.

To further explore the extent to which low and middle income families are truly being served by the program, a sample of 2,006 borrowers has been drawn randomly from the total number of borrowers as of September 1983. This represented about 8% of the total borrowers. The selection of the observations was guided by the overall distribution of mortgages purchased among government banks and private financial institutions. Likewise, observations without complete information or mortgage documents were excluded. The incidence of mortgages originated in 1982 and 1983

occurring more frequently than those in previous years was not accounted for. There was a problem of getting the files of earlier borrowers since the records were not in order at the time the data were collected. Finally, information gathered for the purpose of this study corresponds to the primary borrower only. Based on the sample selected, the distribution by type of loan approximates the actual distribution of all the borrowers. Hence, for purposes of this study, the sample may be considered fairly representative of the whole population of borrowers.

The distribution of the sample by type of loan was as follows: Pag-IBIG – 67.2%; open housing – 14.9%; BLISS – 1.3% and Pag-IBIG with open housng, pari-passu and home improvement – 16.6% (Table 5.10). A big proportion of the loans taken was used for either acquiring a lot and construction of a residential unit or construction of a residential unit only, i.e., 75.6% (Table 5.11).

TABLE 5.10
DISTRIBUTION BY TYPE OF LOAN

Type of Loan	*Number*	*%*
Open Housing	299	14.9
HDMF or Pag-IBIG	1,348	67.2
BLISS	26	1.3
Pag-IBIG with Open-Housing	274	13.7
Pari-Passu	11	0.5
Home Improvement Loan	48	2.4
TOTAL	2,006	100.0

The distribution by the amount of loan borrowed given in Table 5.12 reveals that almost 40% of the loans were below ₱100,000.00. This may be attributed to the initial loan ceiling of ₱80,000 which was subsequently raised to ₱100,000 in 1981. About 32% of the loans were between ₱100,000 and ₱139,999, and the rest were thinly distributed within the range ₱140,000 and ₱299,999. Nearly 3% fell in the ₱300,000 and above category. Tacking-in was common and this accounts for the relatively high loan values.

Looking at the monthly amortization most of these borrowers pay and comparing this with family income reveals interesting observations (Tables 5.13 and 5.14). Only slightly over 9% of the borrowers pay monthly amortization of ₱499 or lower. About 29%

TABLE 5.11
DISTRIBUTION BY PURPOSE OF LOAN

Purpose	*Number*	*%*
Purchase of an existing residential unit (with previous occupancy)	206	10.3
Lot purchase and construction of residential unit	901	44.9
Construction of a new residential unit	616	30.7
Payment of a long term residential lease	35	1.7
Purchase of a newly constructed housing unit (first occupancy)	81	4.0
For a BLISS unit or Association owned Housing Project	18	0.9
Home Improvement	137	6.8
Open Housing Conversion	12	0.6
TOTAL	2,006	100.0

TABLE 5.12
DISTRIBUTION BY AMOUNT OF LOAN SECURED

Amount of Loan	*Number*	*Percentage*	*Cumulative Percentage*
Below ₱100,000	792	39.48	39.48
100,000 – 119,999	424	21.14	60.62
120,000 – 139,999	217	10.82	71.44
140,000 – 159,999	155	7.73	79.17
160,000 – 179,999	100	4.98	84.15
180,000 – 199,999	80	3.99	88.14
200,000 – 219,999	96	4.79	92.93
220,000 – 239,999	32	1.59	94.52
240,000 – 259,999	31	1.54	96.06
260,000 – 279,999	17	0.85	96.91
280,000 – 299,999	5	0.25	97.16
300,000 and above	57	2.84	100.00
TOTAL	2006		

TABLE 5.13
DISTRIBUTION OF MONTHLY AMORTIZATION

Monthly Amortization	*Number*	*Percentage*	*Cumulative Percentage*
Below ₱250	28	1.39	1.39
250 – 499	159	7.93	9.32
500 – 749	281	14.01	23.33
750 – 999	429	21.39	44.72
1,000 – 1,249	301	15.00	59.72
1,250 – 1,499	229	11.42	71.14
1,500 – 1,749	139	6.93	78.07
1,750 – 1,999	144	7.18	85.25
2,000 – 2,249	71	3.54	88.79
2,250 – 2,499	44	2.19	90.98
2,500 – 2,749	46	2.29	93.27
2,750 – 2,999	39	1.94	95.21
3,000 – 3,249	37	1.84	97.05
3,250 – 3,499	19	0.95	98.00
3,500 – 3,749	12	0.60	98.60
3,750 – 3,999	8	0.40	99.00
4,000 and above	20	1.00	100.00
TOTAL	2,006		

pay ₱1,500 and above. Surprisingly, 20 borrowers (i.e., 1%) are paying monthly amortizations of ₱4,000 and above. The income table tells us that a relatively small proportion of the borrowers earn below ₱1,000 a month, i.e., 5.3%. 64% have monthly family incomes of between ₱1,000 and ₱4,999. More than 30%, therefore, of the borrowers are earning ₱5,000 and above. This distribution obviously tells us that low income families who receive ₱4,000 annually still do not have access to these loans. Even the figures in Table 5.13 indirectly give the same message. A monthly amortization of ₱499 would already account for about 50% of a family income of ₱1,000 a month. Necessarily, if the monthly amortization should not exceed 25% of family income, then to be able to amortize ₱499 monthly, the family should be earning at least ₱1,996 monthly. Definitely, an ordinary worker cannot earn this much.

The above discussion clearly conveys an alarming message. While the government, through the Pag-IBIG fund, aims to provide more

TABLE 5.14
DISTRIBUTION BY MONTHLY FAMILY INCOME[a] IN 1983

Family Income	*Number*	*Percentage*	*Cumulative Percentage*
Below ₱1,000	107	5.33	5.33
1,000 – 1,999	369	18.39	23.72
2,000 – 2,999	364	18.15	41.87
3,000 – 3,999	361	18.00	59.87
4,000 – 4,999	193	9.62	69.49
5,000 – 5,999	148	7.38	76.87
6,000 – 6,999	123	6.13	83.00
7,000 – 7,999	81	4.04	87.04
8,000 – 8,999	43	2.14	89.18
9,000 – 9,999	76	3.79	92.97
10,000 and above	141	7.03	100.00
TOTAL	2,006		

[a]Family income refers to the sum of the incomes of all family members living together in a dwelling unit and sharing common facilities.

housing opportunities to the low income families, the actual operation of the lending system does not reach the target population. Since a large proportion of the Pag-IBIG membership are still the low and middle income families, it appears that they are ironically helping the high income families secure better or more housing units through the subsidized Pag-IBIG loans. In fact, it is a common practice among high income borrowers to apply for a combination of Pag-IBIG and open-housing loans to increase their loan values way beyond the maximum amount of ₱100,000. Instead therefore of improving the distribution of consumption of housing services among the less privileged group, the government program is in fact enhancing a more inequitable distribution favoring the better-off.

3. *Home Financing Corporation (HFC)*

HFC acts as the guarantor of individual loans for homebuilding through the provision of mortgage credit insurance. An HFC guarantee carries with it the unconditional guarantee of the government of the Philippines. The government, through HFC, is committed to guarantee up to at least ₱15 billion worth of mortgages.

Construction and Development Finance

Under this scheme, development and construction loans extended by financial institutions to real estate developers and builders are guaranteed by the government through HFC. This credit guarantee and insurance provide lending institutions the following benefits:

1. Loans guaranteed by HFC are classified as risk-free (HFC carries with it the unconditional guarantee of the government)
2. Financial institutions can lend beyond their single borrowers' limit of 15% of total networth.
3. Loans are not included in the total computation of DOSRI accounts.
4. A lending institution's interest income from HFC guaranteed loans is free from gross receipts tax, and the corporate income and development taxes.
5. Lending institutions have the option to charge 8.5% tax-free interest or 14% interest but gross of taxes.

Likewise, developers and individual borrowers derive a bundle of benefits which would not have been available without the credit insurance program of HFC. In general, though, this program encourages the flow of private funds into housing which normally would not have been made available because of the high-risk nature of housing investments. This consequently allows borrowers for housing to have easier access to funding.

Specifically, the other benefits include the following:

1. Interest income from HFC guarantee-loans are tax exempt and this amount to 5-6% savings to the financial institution which can be passed on to the borrowers through lower interest and premium charges.
2. Developers can borrow as much as 90% of the value of the collateral.
3. HFC formulated several service packages to help private developers in the development of viable housing programs (e.g., Credit Supervision and Project Management, Bishop's Housing Program, Trusteeship Arrangement).

Guarantee approvals as of 1982 hit ₱3.1 billion, an increase of 55% from the previous year's ₱2 billion. 65% of this amount were approved guarantees for development loans, while 27% was for individual housing loans. The number of financial institutions which availed of HFC guarantee almost doubled from 1981 to 1982, i.e.,

64 in 1982 from 33 in 1981. By the end of 1982, thirty-one (31) financial institutions committed ₱7.7 billion of their funds for housing. These included 5 unibanks, 7 local commercial banks, 1 foreign bank and 18 other financial institutions.

Although a more detailed investigation of the performance of this program is not done in this study, a cursory look at the projects under the MFC scheme reveals the same bias in favor of the higher income families. Cost of units put up for sale are still way beyond the reach of the average family.

CHAPTER 6

CONCLUSION AND POLICY IMPLICATIONS

This study attempts to review and evaluate the housing situation in the Philippines and the programs introduced by the government, specifically the shelter finance component of the National Shelter Program. While it is desirable to consider the other components of the Program, the unavailability of more detailed information proved to be a major constraint. The analysis went only as far as the data available warranted it.

The preceding discussions on the housing situation during the last three decades point to the same old problem of insufficient acceptable dwelling units for all households. A considerable number of doubled-up households still exists and the proliferation of unacceptable types of dwellings units still remains unabated especially in NCR. Other problems like the fast rise in the cost of housing and the low incomes of most of the people were also identified. These observations stress the fact that good housing, especially for the low income groups, remains an unrealized dream and it seems their only chance to gain access to such a market is through the help of the government. With the extraordinarily fast rise in the prices of more basic commodities like food and clothing today, it is very likely that less and less people especially among the fixed-income earners, would contemplate on increasing their consumption of housing services either through the purchase of a house or expansion of their existing dwelling units.

Government expenditure on housing has in fact been increasing. As of 1983, actual government expenditure on housing and community amenities amounted to ₱2.3 billion and this represented about 2.3% of GNP, as Table 6.1 indicates.

But government resources are limited and there is a long list of other claims on these resources. Housing has a relatively stable share to total government expenditure until 1982 after which it showed an appreciable increase of 42%.

TABLE 6.1
ACTUAL GOVERNMENT EXPENDITURE ON HOUSING, 1978-1983
(IN MILLION PESOS AT CONSTANT 1972 PRICES)

Year	*Expenditure*	*Proportion of GNP (%)*	*Proportion of total (%) government expenditures*
1978	620	0.7	2.25
1979	1,443	1.6	4.37
1980	1,331	1.4	3.47
1981	1,633	1.7	3.53
1982	1,534	1.5	3.14
1983	2,317	2.3	4.47
1984	1,348*		2.46

*preliminary estimate as of February 1984.
Source: Unpublished figures from the Office of Budget and Management, Ministry of the Budget.

The estimation of the income elesticity of demand for housing for a particular market mainly composed of middle and low income families revealed a highly income inelastic demand. The low elasticity estimate probably suggests that people in this particular market do not really have a choice. They may be constrained to spend any additional income they get on more pressing and basic needs like food. In effect, it should not be interpreted as an indication of the people's lower preference for housing. This result also seems to suggest that very little effect on the consumption of housing services results from any form of income subsidy. Likewise, demand was also found to be highly price inelastic especially among renters. There may have been some bias in this result since it is possible that some of the occupied rented units were covered by the rent control law. Further analysis is therefore required using better quality and more detailed data.

Finally, the review of the country's past housing programs revealed the weaknesses inherent in these programs which resulted in their failure. Some programs were indeed intended to help the poor get better housing facilities, but little success was achieved on account of the absence of coordination among the different housing agencies and inefficient management. In the case of the National Shelter Program, which is still on its 6th year of operation, some success is already manifested in terms of its ability to develop the secondary mortgage market. It is true that its Shelter Finance

Program, which has somehow succeeded in involving the private sector more actively in the housing sector, has benefitted more than 26,000 homeowners (as of September 1983). What it has failed to achieve so far is the fulfillment of its promise to the bulk of the people who contribute a portion of their salary monthly to the fund which helps finance housing activities. The figures presented in Chapter 5 tell us succinctly that the poor families are still deprived of housing loans not because there are explicit rules against their borrowing but because of their low incomes, high housing prices and some implicit barriers in the lending process itself. These implicit barriers include the red tape involved in the processing of the loan which may consume many working hours of an ordinary worker and the relatively high amortization rates. What is more disheartening is the fact that some high-income borrowers avail of these loans to finance the acquisition of more housing units, which they may use for purposes other than living in them.

Resources for housing may be growing but the allocation is definitely not socially desirable. The Pag-IBIG fund, for example, is a way of redistributing private resources to the housing sector since the employer is mandated to give a counterpart contribution to the fund. However, with the way loans are being taken out, these resources are ploughed back into the hands of the better-off. What has been envisioned to solve the gap between need and supply may end up as a source of the widening of this gap, especially among the low and middle income groups.

What can be done then?

In view of the difficulty of major reallocations of scarce resources in favor of housing and lack of access by the poor to the market, policy should be directed at more efficient and equitable intra-sector allocation of resources presently devoted to housing. This means that emphasis in public programs should be placed on truly low-cost housing. Models adopted from other countries are expensive, and while they may satisfy our aesthetic norms, they normally would not be accessible to the needy. The effort therefore to come up with local models using indigenous materials should be more vigorously pursued. This should also be accompanied by an active land development program in order to minimize the rate of increase in land values. In addition to these two programs, what can possibly be introduced is a scheme where core units are initially provided at a much lower cost. Self-help activities can then be initiated by the

occupants themselves to upgrade the unit. This idea of "sweat equity" built up in the production of their dwelling units, although perhaps done very gradually, is expected to encourage the owners to further improve their home condition. The government can then assist in this program by providing the necessary public services, notably sanitary facilities.

Resources of the NHMFC available to finance the operation of the secondary market for home mortgages seem to have fallen short of its intended disbursements lately. From June to December of this year, the Corporation hopes to purchase ₱1,200 million worth of mortgages. Pag-IBIG collections projected for the same period would not be enough to finance NHMFC's disbursements. Also, the sale of BMPCs has reached a standstill. The interest rate subsidy program[37] to be implemented by the NHMFC may not also really attract takers on account of liquidity problems faced by many financial institutions today. On account of this difficulty, interest rates on housing loans are expected to be increased. Very recently, the NHMFC also announced that it plans to finance the funding gap through short term borrowings and the flotation of guaranteed pass through certificates (GPTC).

The heart of the problem seems to lie in the inability of the program to generate enough savings for housing. What is perhaps critical is the HDMF's campaign for more self-employed and self-paying members. These are the people who may have the funds to save and yet may not be in need of housing loans. Likewise, members should be encouraged to take out smaller loans basically for house improvement purposes. Borrowing to build another house is really taking away from three or four low-income borrowers the opportunity to acquire housing.

Undoubtedly, the housing sector can contribute significantly to the social and economic development of the country. Its effects on employment, output, balance of payments, etc. should therefore be carefully studied. However, such effort cannot be realized unless more information on housing will be collected. It is, therefore, recommended that a regular housing survey similar to what is being done in the United States be conducted in the near future. Likewise,

37. This program calls for participating banks to hold on to at least 60% of total mortgages to be originated by them for a total period of about 5 years. During this period, banks shall be given supplemental interest incomes on top of the regular income to be generated by the mortgage assets. For a period of 5 years, the program shall require a budgetary allocation of ₱1.7 billion.

housing agencies should have more active research groups which can probably do collaborative research on housing with other agencies. This will also encourage each agency to develop a system of monitoring basic housing-related information like land values and housing cost, which can be obtained readily.

ANNEX A

LIST OF ORIGINATING FINANCIAL INSTITUTIONS

GOVERNMENT BANKS

1. Development Bank of the Philippines
2. Philippine National Bank
3. Land Bank of the Philippines
4. Philippine Veterans Bank

COMMERCIAL BANKS

1. Allied Banking Corporation
2. China Banking Corporation
3. Equitable Banking Corporation
4. Family Bank and Trust Company
5. Philippine Banking Corporation
6. Rizal Commercial Banking Corporation
7. Security Bank and Trust Company
8. Traders Royal Bank
9. United Coconut Planters Bank
10. Union Bank of the Philippines
11. International Corporate Bank
12. Philippine Commercial and Industrial Bank
13. Insular Bank of Asia and America
14. Manila Banking Corporation
15. Consolidated Bank and Trust Company
16. Prudential Bank
17. Commercial Bank of Manila
18. Republic Planters Bank

PRIVATE DEVELOPMENT BANKS

1. Bacolod City Development Bank
2. Bangko Makati
3. Bataan Development Bank
4. Capitol City Development Bank

5. Cavite Development Bank
6. Cebu City Development Bank (Banco Cebuano)
7. Davao City Development Bank (Banco Davao)
8. Development Bank of Rizal
9. Luzon Development Bank
10. Northern Mindanao Development Bank
11. Peninsula Development Bank
12. People's Development Bank
13. Planters Development Bank
14. Premiere Development Bank
15. Quezon City Development Bank (Asiatrust)
16. Quezon Development Bank
17. Second Laguna Development Bank
18. Second Pampanga Development Bank
19. Southern Negros Development Bank
20. Tarlac Development Bank
21. Urban Development Bank
22. Dumaguete City Development Bank
23. Lipa City Development Bank
24. Quezon City Development Bank

SAVINGS AND LOAN ASSOCIATIONS

1. Admiral United Savings Bank
2. Asian Savings Bank
3. Balanga Savings Association
4. Builders Savings and Loan Association
5. City Savings Bank
6. Daily Savings Bank
7. Davao Savings and Loan Association
8. Domestic Savings and Loan Association
9. Farmers Savings and Loan Association
10. First Savings and Loan Association
11. First Iligan Savings and Loan Association
12. Fortune Savings and Loan Association
13. Homeowners Savings and Loan Association
14. Hermosa Savings and Loan Association
15. Iloilo Savings and Loan Association
16. Intercity Savings and Loan Association
17. International Savings and Loan Association
18. Legaspi Savings and Loan Association

19. Liberty Savings and Loan Association
20. Life Savings and Loan Association
21. Mariveles Savings and Loan Association
22. Maunlad Savings and Loan Association
23. Merchants Savings and Loan Association
24. Molave Savings and Loan Association
25. Paluwagan ng Bayan Savings and Loan Association
26. Pangasinan Savings and Loan Association
27. Permanent Savings and Loan Association
28. Perpetual Savings and Loan Association
29. Pioneer Savings and Loan Association
30. Reliable Savings and Loan Association
31. Royal Savings Bank
32. Sandigan Savings and Loan Association
33. Summa Savings and Loan Association (Regent)
34. Town Savings and Loan Association
35 University Savings and Loan Association
36. Pag-asa Savings and Loan Association

BUILDING AND LOAN ASSOCIATION

1. Manila Building and Loan Association

INSURANCE COMPANIES

1. AFP-MBAI
2. United Coconut Planters Life Assurance Corporation
3. Pioneer Life Assurance Corporation

FINANCE COMPANIES

1. FNCB Finance

INVESTMENT HOUSES

1. Ayala Investment and Development Corporation
2. Anscor Capital Investment Corporation

SAVINGS AND MORTGAGE BANKS

1. Banco de Oro Savings and Mortgage Bank
2. Banco Filipino Savings and Mortgage Bank
3. PAIC
4. Home Savings Bank and Trust Company

5. Monte de Piedad Savings Bank
6. Savings Bank of Manila
7. Philippine Savings Bank

ANNEX B1
TOTAL NUMBER AND COST PER SQUARE METER OF SINGLE RESIDENTIAL UNITS CONSTRUCTED BY REGION, 1977-1983

	1977		*1978*		*1979*		*1980*		*1981*		*1982*		*1983**	
	Total #	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*
Region I	1,787	260	661	442	931	647	857	819	1,113	866	959	885	678	965
Region II	848	236	284	484	415	620	538	759	467	852	414	868	279	907
Region III	1,406	380	1,069	566	1,844	678	1,561	872	2,157	962	2,516	1,050	1,465	1,034
Region IV	3,484	396	1,586	601	2,244	723	2,741	847	2,622	945	2,693	1,058	1,888	1,083
Region V	725	300	385	433	505	615	571	741	563	865	433	929	457	1,066
Region VI	1,163	356	1,122	516	1,177	614	1,100	788	1,052	879	771	913	487	922
Region VII	1,831	402	801	507	1,328	548	985	703	1,355	813	1,396	803	704	810
Region VIII	1,046	176	473	491	679	581	772	720	872	754	643	781	498	1,053
Region IX	943	236	709	485	719	618	679	767	532	781	378	846	218	849
Region X	2,116	242	813	379	1,083	522	1,004	804	1,224	720	890	735	460	737
Region XI	1,432	347	1,177	531	1,522	694	1,576	840	2,414	867	2,818	922	1,661	986
Region XII	634	284	376	404	790	615	701	783	569	790	464	823	274	919
NCR	3,727	726	4,224	844	6,162	952	6,376	1,064	6,811	1,186	9,567	1,229	6,759	1,179
PHILIPPINES	21,142	465	13,680	657	19,399	768	19,461	912	21,751	996	23,942	1,080	15,828	1,086

*For the first two quarters only.

ANNEX B2
TOTAL NUMBER AND COST PER SQUARE METER OF DUPLEX UNITS CONSTRUCTED BY REGION, 1977-1983

	1977		*1978*		*1979*		*1980*		*1981*		*1982*		*1983**	
	Total #	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*
Region I	145	521	13	475	129	619	60	865	37	845	39	798	32	845
Region II	83	256	12	506	36	588	65	686	33	790	18	838	14	864
Region III	36	353	26	586	92	648	70	826	126	894	156	899	147	1,067
Region IV	158	394	64	534	89	744	172	811	130	1,024	113	1,061	118	1,069
Region V	45	245	10	609	20	603	43	693	22	846	24	932	30	956
Region VI	62	301	31	484	53	606	32	732	27	897	26	644	35	993
Region VII	49	353	41	402	100	521	48	655	34	688	34	738	24	810
Region VIII	51	234	16	480	43	500	35	713	19	861	35	723	13	760
Region IX	58	224	22	537	64	567	33	546	34	517	15	852	13	837
Region X	134	282	49	379	85	490	70	574	25	680	24	603	17	988
Region XI	58	249	27	513	73	718	66	801	85	721	110	863	27	941
Region XII	28	264	21	406	48	592	63	682	23	759	15	632	11	782
NCR	211	744	254	338	548	936	515	998	507	1,122	616	1,171	703	1,286
PHILIPPINES	1,118	480	586	369	1,380	774	1,272	869	1,102	987	1,225	1,030	1,184	1,174

*For the first two quarters only.

ANNEX B3
TOTAL NUMBER AND COST PER SQUARE METER OF APARTMENTS/ACCESSORIA CONSTRUCTED BY REGION, 1977-1983

	1977		*1978*		*1979*		*1980*		*1981*		*1982*		*1983**	
	Total #	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*	*Total #*	*Cost*
Region I	13	1,725	7	584	18	197	14	1,313	17	1,066	20	1,037	9	957
Region II	16	377	8	514	24	714	19	863	14	980	7	818	2	702
Region III	45	305	25	498	37	724	39	687	55	754	65	767	44	869
Region IV	85	338	43	445	42	610	60	840	77	880	57	1,623	40	921
Region V	12	436	10	599	14	635	12	759	8	1,266	13	851	8	945
Region VI	5	452	13	420	9	368	6	611	5	850	4	849	1	1,085
Region VII	25	500	17	464	32	1,955	17	663	10	820	21	848	7	795
Region VIII	5	219	4	443	16	285	15	599	4	748	5	519	2	661
Region IX	1	285	10	580	16	773	14	708	6	967	2	528	5	757
Region X	34	443	17	538	21	297	9	733	12	605	8	975	3	648
Region XI	22	306	19	377	175	1,170	14	752	10	613	11	872	5	750
Region XII	9	456	19	358	11	374	12	650	17	668	5	741	2	1,000
NCR	320	404	343	959	447	1,154	508	1,169	460	1,095	766	1,074	328	1,109
PHILIPPINES	592	410	535	805	862	968	739	1,080	695	1,046	984	1,081	456	1,065

*For the first two quarters only.

ANNEX C

DEFINITION OF TERMS AND CONCEPTS

Dwelling Unit: a separate and independent place of abode intended for habitation or one not intended for habitation but occupied as living quarters by a household at the time of the census. In most places in the country a dwelling unit is a house. It may be an apartment, a group of rooms or just one room, a barong-barong, boat or cave.

Types of buildings

Single house – a complete structure intended for a single family or household

Duplex – a structure intended for two households with complete living facilities for each. It is a single structure divided into two dwelling units by a wall extending from the floor to the ceiling.

Apartment or Accesoria – a structure usually of several stories, made up of independent quarters with independent entrance from internal halls or courts. An accesoria is a one or two-floor structure divided into several dwelling units, each dwelling unit having its own separate entrance from outside.

Barong-barong – a shack or makeshift shelter, usually built with light materials.

Commercial building – a building used for trade and commerce such as a store or an office buidling.

Industrial building – a building used for processing or manufacturing, such as a factory plant.

Agricultural building – any structure used for agriculture purposes, such as barn, warehouse, etc.

Institutional building – a hospital, school, church, etc.

Others – any structure which does not fall into any of the above classification.

Type of Tenure

Owner occupied only – a dwelling unit where the owner is one of the persons living in the unit even if he is temporarily absent.

Rented only – if rent is paid or contracted for by occupants, in cash or in kind.

Occupied rent free – a dwelling unit which is occupied by a household.

These are standard NCSO definitions.

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